Impact of the Alert Program on School Function for At Risk Cohorts in the Kindergarten Classroom: A Four Year Review of the Data

by

Leslie LaBelle

September, 2015

Director of Thesis: Dr. Carol Lust, Ed.D., OTR/L

Major Department: Occupational Therapy

A child's ability to process, organize, and respond to incoming sensory information and to self-regulate often impacts his or her school performance. The Alert Program, was established with the goal of teaching students the skills needed for self-regulation and therefore, has the potential to yield school function outcomes. This study examined the impact of a classroom approach to the Alert Program on school function for identified at risk students. Retrospective in nature, subjects for this study included 104 kindergarten students at an independent private school in eastern North Carolina between the years 2010-2014. Program implementation consisted of 40-60 minute weekly sessions over 5 months; sessions were led by three to four East Carolina University Occupational Therapy students. Data was collected using the *Sensory Processing Measure: Main Classroom* (SPM-C) and the *School Function Assessment–Part III Activity Performance: Cognitive/Behavioral tasks* (SFA). A master panel comprised of early elementary teaching faculty provided input as to what areas of school function are addressed, expected, and most developmentally appropriate at the kindergarten level; feedback revealed that the areas most relevant include: following social conventions, personal care awareness, behavior regulation, task/behavior completion, and positive interaction. Data analysis of student performance on the SFA in each of these pre-identified categories showed significant

improvement ($p < .05$) for identified at risk students after participation in the Alert Program. Results suggest the Alert Program, a sensory-based approach to teaching self-regulation, produces end outcomes in areas of school function, particularly for at risk students. However, while the classroom approach was successful for the majority of students, some students may likely benefit more from an individualized approach.

Impact of the Alert Program on School Function for At Risk Cohorts in the Kindergarten Classroom: A Four Year Review of the Data

A Thesis

Presented To the Faculty of the Department of Occupational Therapy

East Carolina University

In Partial Fulfillment of the Requirements for the Degree

Master of Science in Occupational Therapy

by

Leslie LaBelle

September, 2015

Impact of the Alert Program on School Function for At Risk Cohorts in the Kindergarten Classroom: A Four Year Review of the Data

by

Leslie LaBelle

APPROVED BY:

DIRECTOR OF THESIS: _____
Carol Lust, Ed.D., OTR/L

COMMITTEE MEMBER: _____
Jane A. Painter-Patton, Ed.D., OTR/L, FAOTA

COMMITTEE MEMBER: _____
Leonard Trujillo, Ph.D., OTR/L, FAOTA

CHAIR OF THE DEPARTMENT
OF OCCUPATIONAL THERAPY: _____
Leonard Trujillo, Ph.D., OTR/L, FAOTA

DEAN OF THE
GRADUATE SCHOOL: _____
Paul Gemperline, Ph.D.

ACKNOWLEDGEMENTS

I would like to express my sincere gratitude to my thesis advisor, Dr. Carol Lust, for her continuous support, encouragement, and guidance; also, to Dr. Robert Lust for his statistical support and insightful comments. Thank you to my committee members Dr. Jane Painter-Patton and Dr. Leonard Trujillo for their contributions in providing thoughtful feedback. Additionally, thank you to The Oakwood School faculty who have welcomed my colleagues and me into their classrooms over the years; special thanks to the faculty who served on the master panel, in particular Susan Brown, Cindy Atkinson, Edwin Grabill, and Tracy Strickland, who contributed their time and valuable expertise to guide my research.

TABLE OF CONTENTS

LIST OF FIGURES

CHAPTER 1: INTRODUCTION

The passing of the Individuals with Disabilities Education Act (IDEA) of 2004 expanded the service population for school-based occupational therapists (Roley, Bissell, & Clark, 2008). Now, school-based occupational therapists not only address engagement in education for identified students with an Individualized Education Program or 504 plan, but also for students in the general education setting who do not have an identified diagnosis or disorder (Roley, Bissell, & Clark, 2008). Occupational therapists now provide early intervening services to students in kindergarten through grade 12 under the Response to Intervention (RTI) model (Johnson, Mellard, Fuchs, & McKnight, 2006). Under the RTI model, services are implemented with the goal of equipping all students with academic and behavioral support in order to promote success in school (Johnson, Mellard, Fuchs, & McKnight, 2006).

RTI provides a framework for early intervening services that is designed to assess, monitor, and enhance student progress with the goal of addressing student needs while allowing classroom placement to be maintained (Johnson, Mellard, Fuchs, & McKnight, 2006). The model provides a tiered approach to assessment and intervention in order to support all students. Tiers are typically one through three, but schools may choose to establish any number of tiers beyond tier three. Tier one, or primary intervention addresses the school or classroom in whole. Tier two, or secondary intervention, addresses identified at risk students through specialized group interventions. Tiers three and beyond address students with intensive needs through a specialized and individualized approach. The role of occupational therapists in the RTI model involves assisting with screening tools, educating and supporting teachers and staff, providing student resources and intervention strategies, and referring students to special education and related services as needed (Reeder, Arnold, Jeffries, & McEwen, 2011).

In the RTI model, occupational therapists in schools may provide services to individuals with sensory processing and/or self-regulation difficulties. These difficulties have the potential to affect a child's ability to access the general and special education curriculum, behave adaptively, and participate in activities at school (Roley et al., 2008). Self-regulation is defined as "the ability to attain, maintain, or change how alert one feels appropriately for a task or situation" (Williams & Shellenberger, 1996, p. 1-5). Self-regulation refers to the processes through which an individual maintains levels of emotional, motivational, and cognitive arousal that support activity engagement (Blair & Diamond, 2008). Individuals with sensory processing difficulties often have difficulty with self-regulation as they are unable to process, organize, and respond to sensory input at the neurological level (Ayers, 1979). They have difficulty regulating their responses to sensation and therefore maintaining an appropriate arousal level (Ben-Sasson, Carter, & Briggs-Gowen, 2009). Children with sensory processing difficulties, who have trouble with self-regulation, may respond by withdrawing and avoiding the sensation or by seeking the sensation, which ultimately can affect their level of school engagement and function (Miller & Summers, 2001). It is estimated that 5-15% of children may have difficulty modulating their response to a sensation, which often becomes apparent in the transition from home to beginning school (Miller & Summers, 2001; Reynolds & Lane, 2008). Why do these difficulties often become apparent in the transition to school? The school environment is often more chaotic than the home and places increased learning demands on the child, because the school is an environment in which the child often has less control of their surroundings (Miller & Summers, 2001; Reynolds & Lane, 2008).

An approach that addresses the needs of individuals with difficulties in sensory processing is the theory of Sensory Integration, developed by Dr. A. Jean Ayers (1972).

Providing occupational therapy services using a Sensory Integration frame of reference, encourages sensorimotor activities that involve proprioceptive, vestibular, tactile, visual, and auditory stimulation. Ayers (1979) proposed that sensorimotor activities help the brain and nervous system develop the necessary interconnections to be able to appropriately and adequately process sensory information (Ayers, 1972). Ayers (1979) also emphasized that the end outcomes of Sensory Integration should include the skills necessary for school function, such as the abilities to organize and to concentrate.

The Alert Program is a specific intervention grounded in Ayers' theory of Sensory Integration. Founded by occupational therapists, Mary Williams and Sherry Shellenberger, the program outlines techniques that can be implemented by teachers under the guidance of occupational therapists to help children learn skills of self-regulation. The program is designed "to help children recognize and regulate their own arousal states" (Williams & Shellenberger, 1996, p. 1-1). Levels of alertness are compared to engine speeds, gears, or levels which are running high, low, or just right; this encourages participants to recognize and monitor their own level of alertness. Children are taught that no speed is wrong, but speeds can be adjusted to be appropriate for the task at hand. A series of sensorimotor activities are incorporated in the classroom to increase student awareness of how their level of alertness can change. Alert activities can be implemented in individual or in group settings. The program originally was developed for children 8 to 12-years-old having identified learning disabilities. Since then, the program has been adapted to include a wider age range and no longer specifically requires an identified learning deficit.

Purpose of the Study

Research on the Alert Program implementation in the kindergarten classroom has been

carried out by East Carolina University occupational therapy students under the direction of Dr. Carol Lust from fall 2010 - spring 2014. Annual results of overall classroom responses from the previous years of research have shown the Alert Program is an effective intervention for improving sensory processing and school function. For example, in the 2011-2012 school year, when compared to a control group that did not receive the Alert Program, the Alert Program group showed more significant improvements in both school function and sensory processing between pre-test and post-test.

Monica Powell (2013) completed a follow-up study on first and second grade students at the same school. Many of the students participated in Alert Program research in kindergarten. Instead of providing Alert Program intervention to the whole classroom, Powell (2013) established an "intention to treat" stratification based on students' *Sensory Processing Measure-Main Classroom* (SPM-C) pre-test scores. Students scoring within the intention to treat stratification were included in a targeted tier three RTI approach using the Alert Program. Powell (2013) created the "intention to treat" stratification by selecting the SPM-C subcategories that she believed the Alert Program most intently targets. The four subtests Powell selected included: vision, hearing, touch, and balance and motion. The total sensory systems score also was included. Students scoring in the "some problems" or "definite dysfunction" category on at least one of the selected subtests or total score were included in the Alert Program tier three intervention.

Powell's (2013) research led to the question of whether or not a similar intention to treat stratification could be created based on student scores on the *School Function Assessment-Part III Activity Performance: Cognitive/behavioral tasks* (SFA). After all, the SFA evaluates the classroom end outcomes of adequate sensory processing and self-regulation. Additionally,

school function outcomes, rather than measurements of sensory processing, are more meaningful and relevant to teachers. Creating an intention to treat stratification based on SFA scores would allow occupational therapists to focus efforts on identified at risk students while teachers apply intervention strategies under the guidance of occupational therapists to the general classroom population. The specific research question used to guide this study was: Does the Alert Program, when implemented as a tier one to tier two RTI model in the kindergarten classroom, produce a preferential benefit in students identified as at risk for the selected SFA categories? The large sample size acquired over 4 years of research allowed for the at risk cohorts to now be examined in depth for each category of the SFA.

CHAPTER 2: LITERATURE REVIEW

Response to Intervention (RTI)

Reeder et al. (2011) completed a study on a school district's inclusion of occupational therapy in general education elementary school RTI programs. Occupational therapists and physical therapists were involved in a four step process which included: (a) administering the FirstSTEP screening tool, (b) educating and supporting teachers and staff, (c) providing student resources and intervention strategies, and (d) referring students from RTI to special education and related services. The standardized FirstSTEP screening tool measures performance across a variety of domains including language, cognition, fine motor, and gross motor for children between 2 and 6-years-old. After receiving screening tool feedback and collaborating with teachers, the occupational therapists identified the primary need areas as being handwriting, bilateral integration skills, and sensory regulation. The therapists then designed individualized interventions and provided teachers with two to three strategies at a time to try. If the strategies worked, then the therapists might not have provided any additional assistance. If the strategies were not addressing the student's needs, the therapist and teacher then chose another set of strategies to try. The periods of collaboration and experimentation with strategies continued until the student's needs were adequately addressed or until a referral to special education was identified as necessary. The students were re-evaluated with the same screening tool and the researchers found the students were now progressing with their peers.

An important outcome of the teacher-therapist collaboration process included that teachers gained an understanding of the roles of the therapists (Reeder et al., 2011). For example, teachers began verbally requesting intervention strategies for students who were "always in motion" (Reeder et al., 2011, p. 51). During the study, the therapists saw a need to

create strategy boxes containing intervention items, suggestions for making several of the items, information to purchase/order the items, and information on why/how to use the items. The therapists reported teachers were using the strategy boxes. One-on-one training was done with the teachers who had students seeing a RTI occupational or physical therapist.

This study provides positive feedback on the RTI model and suggests promising strategies for encouraging teacher involvement and teacher-therapist collaboration in service delivery. However, an important outcome to consider is that the occupational therapist workload was increased to a point that adding RTI participation was not well accepted by the occupational therapists (Reeder et al., 2011). Therefore, practicality related to therapist workload needs to be considered when evaluating potential RTI approaches.

Self-Regulation: Impact on Academics

A survey of 3,595 kindergarten teachers across the nation indicated that 50% or more of the children in their classrooms demonstrated a lack of school readiness (Rimm-Kaufmann, Pianta, & Cox, 2001). The most noted problems were with following directions and controlling attention, secondary to difficulties with self-regulation. Blair and Diamond (2008) examined the development of self-regulation skills and the implications that concerns with self-regulation can have on school success. Blair and Diamond concluded that well-developed self-regulation skills could prevent school failure and that therefore promoting self-regulation should be a central goal for prekindergarten and early elementary education curricula.

Further, exploring the implications of difficulties with self-regulation, the American Occupational Therapy Association (AOTA) (2009b) compiled an evidence-based literature review of the difficulties demonstrated by children and adolescents with Sensory Processing Disorders. Research suggests Sensory Processing Disorder may correlate with lower

participation in school activities, decreased academic achievement and attention, and an increased risk for developing learning difficulties (AOTA, 2009b). For example, Dewey, Kaplan, Crawford, and Wilson (2002) compared 45 children with developmental coordination disorder (DCD), a relevant diagnosis to Sensory Processing Disorder, 51 children suspect of having DCD, and 78 children without motor coordination deficits. The participants, at an average age of 11-years-old, were recruited from public and private schools. Assessments used included: (a) the Attention Problems subscale and the parent form of the Child Behavior Checklist to measure attention and psychosocial adjustment, (b) the Woodcock-Johnson Psychoeducational Battery Revised to measure reading and writing skills, and (c) the Wide Range Achievement Test-Revised to measure spelling skills. The researchers found children with DCD had significantly poorer performance on attention and learning tasks, such as spelling, reading, and writing when compared to the group of children without motor coordination deficits. Dewey et al. concluded participants with DCD were at "significant risk for school failure and intervention in both motor and academic areas may be essential to improve academic outcomes" (p. 914).

Ayers' Sensory Integration Theory

Ayers' belief that sensorimotor activity provides a foundation for learning is supported by the American Occupational Therapy Association's (2009a) evidence-based literature review on the neurophysiologic evidence for using principles of Sensory Integration. The review concluded that the sensory environment influences brain activity and that a rich sensory environment paired with meaningful activity facilitates neuroplasticity. Specifically, studies have shown learning, memory, and behavior to be positively influenced by enriched sensory, motor, and problem solving opportunities (AOTA, 2009a).

For example, Barros, Silver, and Stein (2009) compared group classroom behavior of children receiving at least one 15 minute recess session daily to children not receiving daily recess. Behavior was measured by teacher report rankings on a scale of 1 to 5 with a sample size of 15,305 children between 8 and 9-years-old. Children receiving daily recess, or a daily opportunity to move around and receive sensorimotor input demonstrated a significant difference in behavior at $p < .001$ when compared to children not receiving recess. However, an important limitation of this study is that recess was not defined by the researchers. Instead, it was left up to the teachers to decide what qualified as recess, considering across the United States, recess is defined, timed, and implemented in a variety of ways. The activities children participated in during recess were not recorded and so the exact sensory input received was unknown and variable among each student or school. With the limitations considered, this study provides initial data suggesting that children should be given the opportunity for sensorimotor input during the school day, due to its significant positive impact on behavior.

Gathering data on a specific sensory-based intervention, VandenBerg (2001) examined the impact of weighted vests, which provided passive deep-pressure sensory input, on student attention. Four students between 5 and 6-years-old, either diagnosed with Attention Deficit Hyperactivity Disorder or who scored in the high/problems range on the hyperactivity and attention scales of the Conners' Teacher Rating Scales, were observed for six 15 minute sessions without the vests and for six 15 minute sessions with the vests. The students were timed with a stopwatch by the observers to measure their time on task during classroom fine motor skill activities. All four students demonstrated a significant increase in time on task while wearing the vest compared to when not wearing the vests. It was concluded that the passive deep pressure

sensory input of weighted vests has the potential to increase student attention and time on task behavior.

Further, evaluating the effects of proprioceptive and vestibular input on attention, Fedewa and Erwin (2011) examined the use of stability balls in the classroom. A group of eight students in the fourth and fifth grades with attention and hyperactivity concerns were observed for 12 weeks using a single-subject A-B continuous time series design. Increased levels and length of attention and significantly decreased levels of hyperactivity were found with the use of the stability balls in the classroom. Teachers also reported the stability balls helped their students calm down. However, high cost may pose an implication for the use of stability balls in the classroom.

Together, these studies suggest that sensory input, in terms of proprioception, vestibular, and deep pressure input, can have a positive impact on classroom behavior and attention. Directions for future research based on the data gathered through these studies include exploring the impact sensorimotor interventions may have on other areas important to school function and exploring what impact multiple forms of sensorimotor input, such as oral motor, tactile, vestibular, and proprioceptive, may have on academic outcomes. Additionally, although students identified with hyperactivity concerns relates to a broad spectrum of students, there is still limited generalizability with the studies' results.

The Alert Program

Barnes, Beck, Vogel, Grice, and Murphy (2003) distributed questionnaires to school-based occupational therapists with the purpose of gathering data on the perceived appropriateness, extent, and types of services provided by occupational therapists to children with emotional disturbances in public schools. The information gathered from the 476 responses

indicated the Alert Program was a commonly used intervention in schools for children with emotional disabilities. Teachers, principals, speech therapists and occupational therapists reported it to be cost-effective and a model for best practice in the school setting (Salls & Bucey, 2003).

Zeidler (2012), an occupational therapist, considered whether the Alert Program was an effective school-based intervention to improve attention to task in 7 to 10-year-old students with sensory processing difficulties. Seven students, six being on the autism spectrum and one having ADHD, were selected for the study. Students were selected based on their Sensory Profile School Companion results as completed by their teachers and based on teacher feedback as to whether the student could understand the basic components of the program. Zeidler led the implementation of the Alert Program with twelve 30 minute sessions over a 6 week period, keeping in mind each student's individual needs identified in their individualized education program. Zeidler created two scales to gather baseline and outcome self-report and teacher-report data on student self-regulation and attention.

Teacher-reports indicated improved student attention after participating in the Alert Program (Zeidler, 2012). Both student and teacher reports indicated the Alert Program was successful in acclimating students to the use of sensory input to regulate behavior and attention to task. For example, student responses to the qualitative question of "What are things you can do to help you focus on your work when you are feeling tired and sluggish or over-excited and hyper?" (Zeidler, 2012, p. 17) were gathered at pre-test and post-test. Pre-test responses included comments such as "I don't know" and "I take pills". Post-intervention responses included appropriate classroom self-regulation strategies such as "squeeze my ball, wear my vest, sit on my comfy cushion, push my hands together" (Zeidler, 2012, p. 18).

For future studies, Zeidler (2012) made several suggestions to consider, such as including students younger or older than the 7 to 10-year-old range, as the Alert Program can be adapted for a variety of ages. Also, the interventions should not begin until after the first two weeks of school to allow time for adjustment to the school environment. Additionally, the intervention timeframe should be expanded from 6 to 8 weeks to provide time to monitor classroom implementation of the sensory-based tools. Lastly, Zeidler's study relied on self-report tools to measure progress; future studies could incorporate standardized measurement tools with proven reliability and validity for more accurate result interpretation.

Also, implementing the Alert Program in a classroom setting with selected students, Barnes, Vogel, Beck, Schoenfeld, and Owen (2008) evaluated its use for children with emotional disturbances. Research suggests emotional disturbance often co-occurs with sensory processing problems, which can impact school function (U.S. Department of Education, 2000). The researchers evaluated the impact of the Alert Program on improving sensory processing, self-regulation, and behavioral adjustment skills of children with emotional disturbance. Seven participants between 9 and 11-years-old participated in the Alert Program for 8 weeks and were compared to a control group of five children who did not. Teachers completed the Sensory Profile on each child to measure the effects of sensory processing on functional performance. The Devereux Behavior Rating Scale was completed by the teachers to evaluate behavior. The Self-Efficacy for Self-Regulation of School-aged Children and Teacher's Perception of Student's Efficacy in Self-Regulation tools were developed for the study to measure self-efficacy for self-regulation. Each assessment tool was administered at pre-test and post-test. Prior to implementing the Alert Program, the teachers attended a training session hosted by the researchers about sensory processing and the Alert Program. The intervention phase consisted of

three sessions per week during the first three weeks and one session per 2 weeks for the remaining 5 weeks. The Alert Program manual provided direction on the sequencing of activities and types of activities. Teachers also implemented Alert Program strategies into their routine classroom activities.

Results from Barnes et al. (2008) indicated the children who participated in the Alert Program demonstrated small improvements in each measure, while control group data remained constant or decreased. However, the study's statistical power was weak due to the small sample size and small effect size, limiting the ability for treatment effects to be detected. Results suggested the Alert Program was effective in helping to improve children's abilities to self-regulate, change tasks, organize themselves, cope with sensory challenges, and focus on tasks in the classroom as perceived by teachers. The researchers concluded more clinical research and increased classroom implementation of the Alert Program is needed to confirm the value of the program in improving classroom self-regulation.

Introducing the Alert Program into the general classroom setting, Mac Cobb, Fitzgerald, Lanigan-O'Keeffe, Irwin, and Mellerick (2014) found the program to be effective at teaching student self-management. Mac Cobb et al. (2014) completed two trials of the Alert Program using a collaborative approach between teachers and occupational therapists at four post-primary schools for students in areas of social disadvantages. The trials consisted of 40 minute sessions once a week over the course of 5 to 8 weeks. In total, 84 students age 12 to 13 participated. The researchers used teacher, student, and occupational therapy self-report questionnaires to gather data. At the conclusion of the program, students reported they gained an understanding of their behavior and of self-management strategies they could use in the classroom. Teachers reported having gained strategies to use in the classroom to help students calm themselves. Teachers also

reported the program helped them identify students with sensory processing difficulties. The researchers concluded with recommending the program be implemented school wide. A specific concern that was recognized by the occupational therapists involved was that some students with complex challenges might better benefit from small group or an individualized approach.

In summary, preliminary research suggests the Alert Program can be a valuable intervention, providing the needed sensorimotor input and self-regulation training for students with sensory processing and self-regulation concerns. However, additional research is needed to further evaluate the effectiveness of the Alert Program as an RTI approach in the general classroom, and the functional school related outcomes the program may produce for children at risk.

CHAPTER 3: METHODOLOGY

Design

A retrospective cohort design was used for the evaluation of the effect of the Alert Program on at risk kindergarten students in terms of school function. Data gathered from 2010-2014 by East Carolina University Occupational Therapy students under the supervision and direction of Dr. Carol Lust was compiled and analyzed. All data used in this study were collected under protocols previously approved by the Institutional Committee for the Protection of Human Subjects (IRB). The studies were classified as exempt (see Appendix A for IRB Letter of Approval). Parental consent for all students who participated in these studies was obtained (see Appendix B for an example of the parental consent form). Due to limitations and variations with the use of control groups in the previous years of research, a control group was not used for this study. Instead, each student served as his or her own control, with pre-test scores being considered baseline scores without the Alert Program and post-test scores being considered scores resulting from the Alert Program.

School Function Assessment-Part III Activity Performance: Cognitive/behavioral tasks (SFA) criteria for each individual category were used to identify students as being at risk or not at risk based on results in both pre-test and post-test scores. The criteria for determining risk were established using input from a master panel of teachers at The Oakwood School (see master panel section below for additional details). The data from the 4 year period were aggregated to provide the large sample size needed to evaluate for statistically meaningful comparisons between score differences in each of the cohorts of at risk and not at risk students.

The previous 4 years of research used a pre-test post-test design to compare SFA and *Sensory Processing Measure-Main Classroom* (SPM-C) scores before and after implementation

of the Alert Program. The Alert Program was led by three to four different research students each year under the supervision and direction of Dr. Carol Lust. The research students and Dr. Carol Lust visited the two kindergarten classrooms at The Oakwood School, an independent private school in eastern North Carolina once per week for three-quarters of the school year. Weekly sessions, for 5 months, lasted 40-60 minutes and were guided by strategies and activities from Williams' and Shellenbergers' (1996) *How Does your Engine Run?*. The sessions comprised of introducing students to the concept of using engine levels to describe their level of alertness. Sensorimotor activities were provided for the students to begin to explore how their level of alertness could be changed. Examples of sensorimotor activities used include: providing proprioceptive input using a weighted ball and weighted two liter bottles as pins during a bowling activity; providing oral motor input by using straws to blow cotton balls; and providing tactile input by searching for items hidden in a bean bin. A sample outline of a weekly session is provided in Appendix C. Activities were typically led in small groups of four to five students. The classroom teachers were present for the Alert Program sessions and were encouraged to carryover Alert Program strategies and discussion of engine levels during the week.

Subjects

Subjects were gathered annually by convenience sampling of kindergarten students at The Oakwood School, an independent private school in eastern North Carolina. The aggregate data over 4 years provided a sample size of 104 kindergarten students (51 males, 53 females). Data were excluded from the study for students who were not enrolled in and attending one of the kindergarten classes at the time of data collection for pre-test or post-test.

Instrumentation

The SPM-C and the SFA were used to collect data in the previous years of research. The

SPM-C assesses sensory processing difficulties, praxis, and social participation for students in kindergarten through sixth grade (Kuhaneck, Henry, & Glennon, 2007). The SPM-C is rooted in the theory of Sensory Integration and measures sensory processing in the school environment across two dimensions. The first dimension is the assessment of sensory systems (visual, auditory, tactile, proprioceptive, and vestibular) and the integrative functions of praxis and social participation. The second dimension is the assessment of sensory integration vulnerabilities within each sensory system; examples include under- and over-responsiveness, sensory-seeking behavior, and perceptual problems.

The SPM-C is completed by a child's primary classroom teacher. The assessment consists of 62 items that are rated in terms of frequency of the behavior on a scale from 1 (*never*) to 4 (*always*). The assessment yields norm-referenced standard scores in the areas of social participation, vision, hearing, touch, body awareness, balance and motion, planning and ideas, and total sensory systems. The standard score in each area classifies a child's functioning as typical (t-score 40-59), some problems (t-score 60-69), or definite dysfunction (t-score 70-80).

Research by Kuhaneck et al. (2007) suggested the SPM-C is both a valid and reliable assessment and discriminates children with and without sensory processing deficits. Kuhaneck et al. (2007) found internal consistency ranging from .74 to .95 for the kindergarten age group, with five of the eight areas being above the ideal goal of .80 as indicated by using Cronbach's coefficient alpha. Test-retest reliability estimates range from .95 to .98 (Kuhaneck et al., 2007).

The SFA evaluates student performance on specific school-related activities that are important to or expected of the student in grades kindergarten through sixth (Coster, Deeney, Haltiwanger, & Haley, 1998). The assessment is composed of three parts: (1) participation, (2) task supports, and (3) activity performance. Activity performance (Part III) is subdivided into

two sections: (1) physical tasks and (2) cognitive-behavioral tasks, or activities involving a significant social, behavioral, or cognitive component.

The section on cognitive-behavioral tasks was used for this study and includes the categories of: functional communication, memory and understanding, following social conventions, compliance with adult directives and school rules, task behavior/completion, positive interaction, behavior regulation, safety, and personal care awareness (Coster et al., 1998). The assessment is in the form of a questionnaire that is typically completed by the classroom's primary teacher. Descriptions of functional activities are provided on the questionnaire and the evaluator provides a response on a scale from 1 (*does not perform*) to 4 (*consistent performance*). The SFA is criterion referenced rather than norm referenced and yields criterion cut-off scores that allow for comparisons to be made to typical grade-level functioning. The cut-off scores are set for the kindergarten through third grade age group as a whole and the questions in each category of the SFA are ordered according to difficulty. Students who scored below the criterion cut-off scores for each category were identified as at risk.

Davies, Soon, Young, and Clausen-Yamaki (2004) found the SFA to appropriately differentiate between students with different types of disabilities, suggesting good validity. Internal consistency estimates were found at a score of .92 to .98 (Coster et al., 1998). Inter-rater reliability was explored by comparing results received by occupational therapists completing the forms and results received by teachers completing the forms (Davies et al., 2004). Results indicated no significant difference in the way the occupational therapists and teachers evaluated the students, despite having different educational backgrounds; in fact, the activity performance section of the SFA, which was used for this study, contained the most similarities

between scores (Davies et al., 2004). Coster et al. (1998) obtained relatively high reliability estimates for the activity performance section with a range from .93 to .98. Test-retest reliability estimates were found at coefficients ranging between .82 and .98 (Coster et al., 1998).

Procedure

The previous 4 years of data on the Alert Program research were gathered and compiled. The data contained student identification numbers, year of participation, classroom teacher, and pre-test and post-test scores for the SFA cognitive-behavioral tasks. Students were identified as being at risk or not at risk for pre-test and post-test for each category of the SFA. Please see Appendices D and E for the complete data spreadsheets of SFA and SPM-C scores for each student.

The purpose of this study was to examine the school function outcomes that result from addressing sensory processing and self-regulation through the Alert Program, particularly for at risk students. The SFA cognitive-behavioral tasks evaluates student functional performance on nine categories including: functional communication, memory and understanding, following social conventions, compliance with adult directives and school rules, task behavior/completion, positive interaction, behavior regulation, safety, and personal care awareness. From these nine categories, five were selected for the intention to treat stratification and included: following social conventions, task behavior/completions, positive interaction, behavior regulation, and personal care awareness. These five categories were selected as most relevant based on input from the master panel (see master panel section below for additional details). The purpose of creating an intention to treat stratification was to identify the categories most developmentally appropriate and important at the kindergarten level for which improvements on would be most

beneficial to student success. The selected categories became the focus for data analysis and review with regards to the impact of the Alert Program on school function.

Master Panel

A master panel comprised of faculty at The Oakwood School was created to guide the selection of the categories that would be used for the intention to treat stratification. The panel members included two kindergarten teachers, one first grade teacher, and one lower school coordinator. The panel met in February 2015 and was led in discussion by the research team, with consideration of each SFA category and the individual questions addressed in each category. Questions asked of the panel included: (a) when beginning kindergarten, what categories do you expect your students to do well in; (b) what categories are developmentally appropriate for a kindergarten student; and (c) what categories would be most beneficial to improve in before going to first grade?

Data Analysis

Chi-square analysis was performed in order to assess differences in the frequency of risk identification between pre-test and post-test. Additionally, ANOVA and t-test analyses were performed to assess numerical score differences between pre-test and post-test for the total sample and for the identified at risk cohorts. Significant differences were indicated when $p < .05$.

CHAPTER 4: RESULTS

The overall objective of data analysis was to determine if implementation of the Alert Program produced a preferential benefit in terms of school function in children identified as at risk on the selected *School Function Assessment-Part III Activity Performance: Cognitive/behavioral tasks* (SFA) categories.

Overall Findings

For every category of the SFA, the cohorts that were identified as at risk at pre-test had a significant reduction in risk identification at post-test. When compared with all of the SFA categories, the pre-selected SFA categories account for five of the top six for frequency of students identified as at risk on the pre-test (see Figure 4.1). Of the total population, the most common category for a student at risk was positive interaction, with more than half (52%) of the students identified as at risk. This was identified by the master panel as an area of focus. The category with the next highest frequency of at risk identification was compliance with adult directives, with about 47% of the students identified. This was the only category in the top six most frequent for risk not identified by the master panel. The remaining areas for risk frequency were behavior regulation (36%), task behavior/completion (34%), personal care awareness (26%), and following social conventions (24%).

Every category of the SFA had between a 40% and 82% reduction in risk identification. Behavior regulation showed the smallest reduction and personal care awareness showed the largest reduction (see Figure 4.2). In these figures, the pre-selected risk stratification categories are identified in red; specific individual evaluation of these follows below.

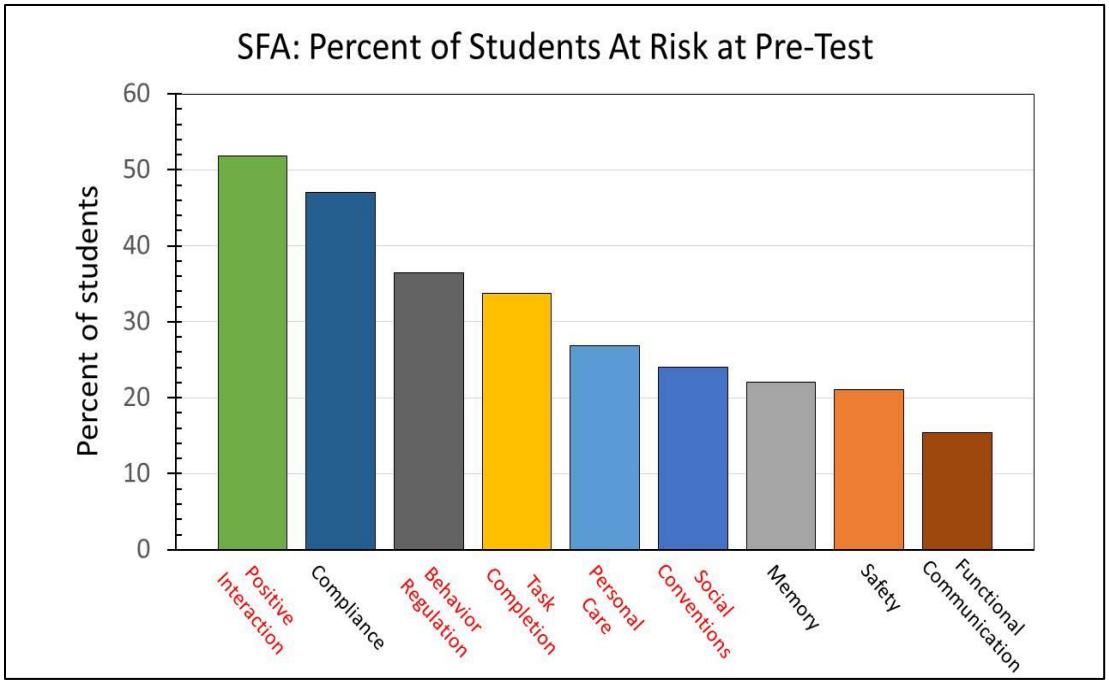


Figure 4.1. Percent of students identified as at risk on the SFA pre-test for each category. The pre-selected SFA categories in red account for five of the top six for frequency of students identified as at risk.

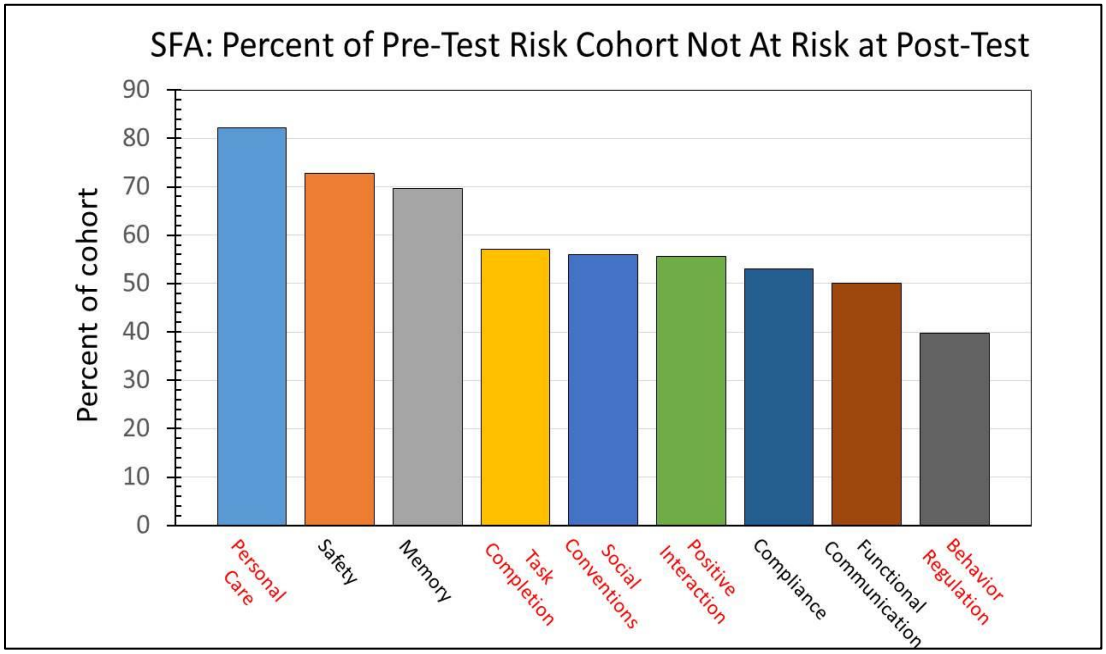


Figure 4.2 Percent of students identified as at risk pre-test and not at risk post-test. Every category of the SFA had between a 40-82% reduction in risk identification.

Following Social Conventions

Following social conventions includes using manners, respecting privacy and property, asking for permission appropriately, and using appropriate language (Coster et al., 1998). Feedback from the master panel revealed that following social conventions was a school wide struggle, especially with the changing dynamics of family meal time; specifically, students frequently require verbal prompts to use manners and to respect the personal space and privacy of others. The master panel agreed that over time there are typically some students who transition to not relying on verbal prompts, but overall most students require consistent prompting.

For this category, the total sample ($n = 104$) showed a significant improvement in mean criterion scores (84.00 ± 16.00 vs. 89.72 ± 14.02, pre-test vs. post-test respectively, $p = .0003$). The original at risk cohort ($n = 25$) also showed a significant improvement in score (59.12 ± 6.83 vs. 78.16 ± 15.29, pre-test vs. post-test respectively, $p < .0001$), although the cohort remained significantly below the overall sample ($p = .0015$). Students in the original at risk cohort and still identified as at risk at post-test ($n = 11$) still showed a significant improvement in mean scores between pre-test and post-test (59.12 ± 6.83 vs. 64.80 ± 4.82, pre-test vs. post-test respectively, $p < .0001$). These data are summarized in Figure 4.3.

Interestingly however, when looking at the overall student distribution between at risk and not at risk, the total sample did not show a significant reduction in risk identification ($p = .2512$). This was because 9/79 students who were not identified as at risk in pre-test scores were identified as at risk in post-test scores. Within the original student distribution there were significant changes between at risk and not at risk at post-test ($p < .0001$). These findings are summarized in figure 4.4.

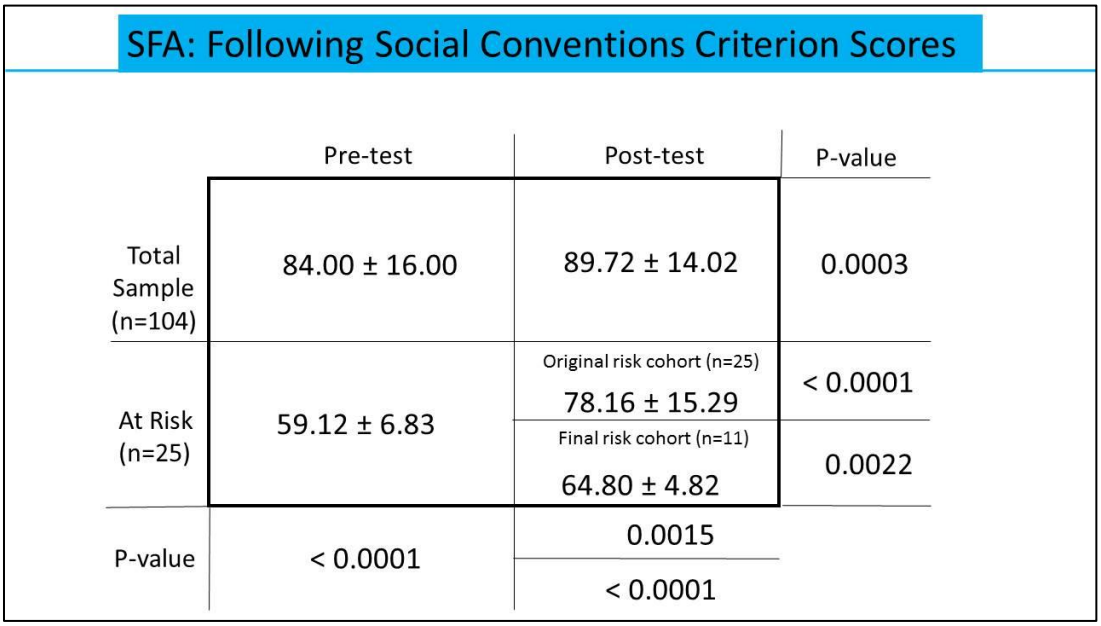


Figure 4.3 Following social conventions mean criterion scores with standard deviations for the total sample and at risk cohort at pre-test and post-test.

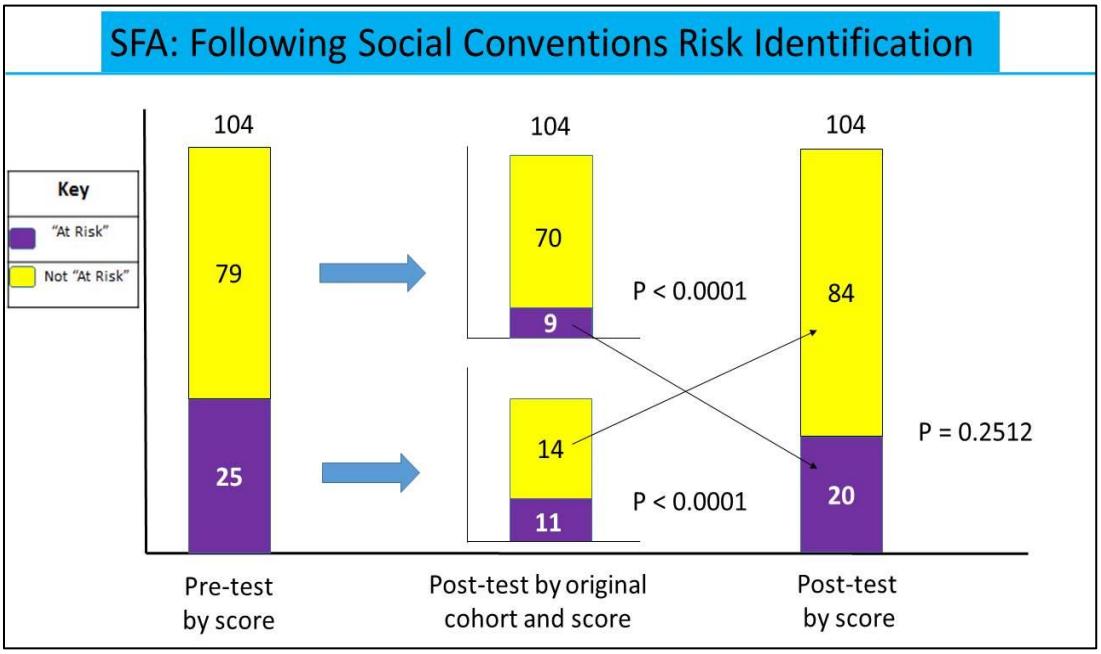


Figure 4.4 Following social conventions frequency of risk identification between pre-test and post-test.

Task Behavior/Completion

Task behavior/completion measures the ability to maintain attention to tasks, work independently, ask for assistance when needed, and modify an approach to a task as needed (Coster et al., 1998). Task behavior/completion was reported by the master panel to be a school wide struggle; teachers want to encourage students to be risk takers and to not be afraid of trying to complete their work independently. The master panel reported, however, that while aspects of task behavior/completion are and/or need to be addressed at the kindergarten level, some aspects are not developmentally appropriate until first grade, such as maintaining 20 minute duration of focus on a presentation. Being a school wide struggle, the panel emphasized wanting to address task behavior/completion at an early age while not expecting mastery at the kindergarten level.

For this category, the total sample ($n = 104$) showed a significant improvement in score (80.85 ± 18.42 vs. 87.33 ± 14.50, pre-test vs. post-test respectively, $p < .0001$). The original at risk cohort ($n = 35$) also showed a significant improvement in score (58.91 ± 8.94 vs. 75.80 ± 15.87, pre-test vs. post-test respectively, $p < .0001$), although the cohort remained significantly below the overall sample ($p = .0004$). Students in the original at risk cohort and still identified as at risk at post-test ($n = 15$) still showed a significant improvement in mean scores between pre-test and post-test (58.91 ± 8.94 vs. 64.53 ± 7.04, pre-test vs. post-test respectively, $p = 0.0234$). These data are summarized in Figure 4.5.

When looking at the overall student distribution between at risk and not at risk, the total sample showed a significant reduction in risk identification ($p = .0002$). 57% of the risk cohort were no longer at risk at post-test, and despite significant increases in score, 43% of the risk cohort remained at risk. These data are summarized in Figure 4.6.

SFA: Task Behavior/Completion Criterion Scores

	Pre-test	Post-test	P-value
Total Sample (n=104)	80.85 ± 18.42	87.33 ± 14.50	< 0.0001
At Risk (n=35)	58.91 ± 8.94	Original risk cohort (n=35) 75.80 ± 15.87	< 0.0001
		Final risk cohort (n=15) 64.53 ± 7.04	0.0234
P-value	< 0.0001	0.0004	
		< 0.0001	

Figure 4.5 Task behavior/completion mean criterion scores with standard deviations for the total sample and at risk cohort at pre-test and post-test.

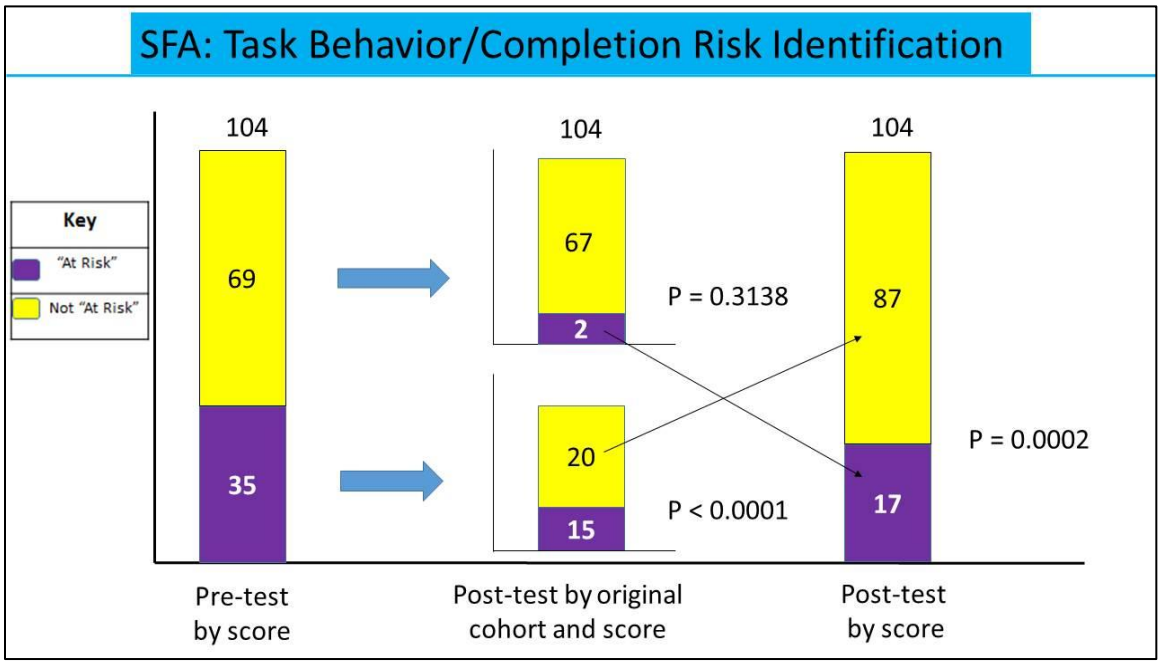


Figure 4.6 Task behavior/completion frequency of risk identification between pre-test and post-test.

Positive Interaction

Positive interaction includes peer interactions, cooperation, conversational norms, taking turns, listening to others, and voice volume (Coster et al., 1998). The master panel indicated that positive interaction with peers and adults is both a focus and an area of difficulty at the kindergarten level. Specifically, listening to others was reported has being a school wide weakness; students were reported as always wanting to share their experiences but having difficulty stepping back to listen to others' experiences.

For this category, the total sample (n = 104) showed a significant improvement in score (80.60 ± 15.29 vs. 88.50 ± 12.61, pre-test vs. post-test respectively, $p < .0001$). The original at risk cohort (n = 54) also showed a significant improvement in score (68.06 ± 8.37 vs. 81.24 ± 12.57, pre-test vs. post-test respectively, $p < .0001$), although the cohort remained significantly below the overall sample ($p = .0008$). Students in the original at risk cohort and still identified as at risk at post-test (n = 24) did not show a significant improvement in mean scores between pre-test and post-test (68.06 ± 8.37 vs. 70.15 ± 6.08, pre-test vs. post-test respectively, $p = .2027$). These data are summarized in Figure 4.7.

When looking at the overall student distribution between at risk and not at risk, the total sample showed a significant reduction in risk identification ($p < .0001$). 56% of the original risk cohort were no longer at risk, while 44% remained at risk. These data are summarized in Figure 4.8.

SFA: Positive Interaction Criterion Scores

	Pre-test	Post-test	P-value
Total Sample (n=104)	80.60 ± 15.29	88.50 ± 12.61	< 0.0001
At Risk (n=54)	68.06 ± 8.37	Original risk cohort (n=54) 81.24 ± 12.57	< 0.0001
		Final risk cohort (n=24) 70.15 ± 6.08	0.2027
P-value	< 0.0001	0.0008	
		< 0.0001	

Figure 4.7 Positive interaction mean criterion scores with standard deviations for the total sample and at risk cohort at pre-test and post-test. No significant change in scores for the original at risk cohort still identified as at risk at post-test.

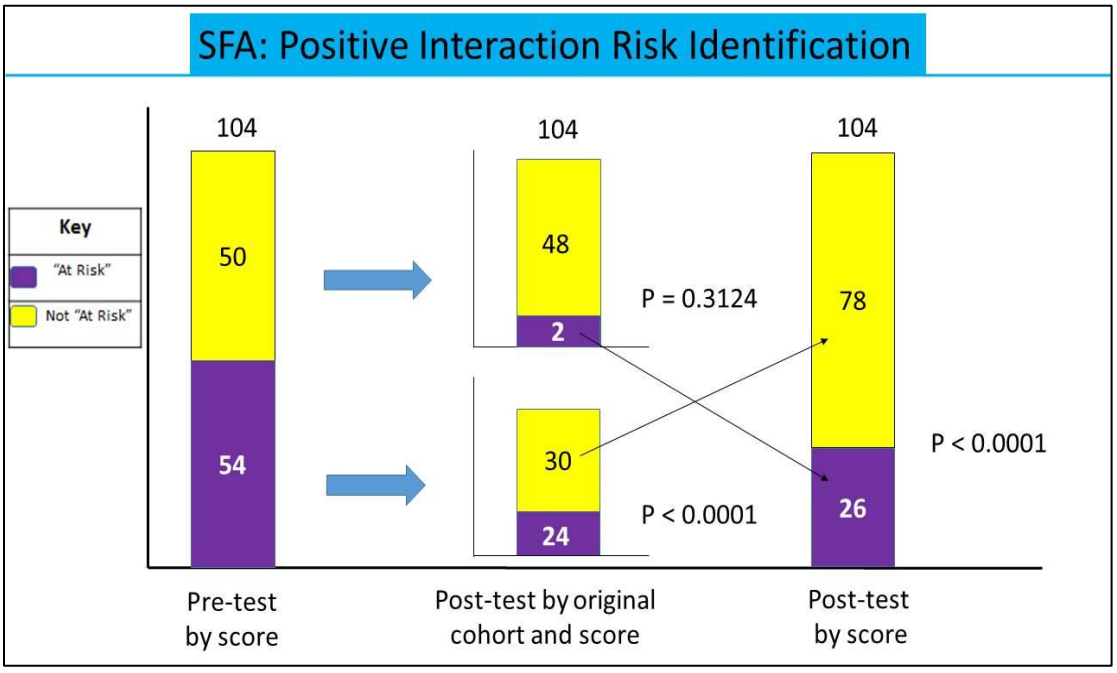


Figure 4.8 Positive interaction frequency of risk identification between pre-test and post-test.

Behavior Regulation

Behavior regulation measures the ability to accept changes in routine, resolve conflicts, maintain self-control, handle frustration, and refrain from self-stimulatory behavior (Coster et al., 1998). Behavior regulation was identified by the master panel as an area that is taught at the kindergarten level in terms of what to do to resolve conflicts; however, independence with this is not emphasized until first grade.

For this category, the total sample (n = 104) showed a significant improvement in score (79.95 ± 18.23 vs. 85.14 ± 17.09, pre-test vs. post-test respectively, p = 0.0006). The original at risk cohort (n = 38) also showed a significant improvement in score (60.03 ± 9.18 vs. 72.32 ± 17.75, pre-test vs. post-test respectively, p < .0001), although the cohort remained significantly below the overall sample (p = .0003). Students in the original at risk cohort and still identified as at risk at post-test (n = 23) did not show a significant improvement in mean scores between pre-test and post-test (60.03 ± 9.18 vs. 61.93 ± 8.19, pre-test vs. post-test respectively, p = .3740). These data are summarized in Figure 4.9.

Interestingly however, when looking at the overall student distribution between at risk and not at risk, the total sample did not show a significant reduction in risk identification (p = .1540). This is because 7/66 students who were not identified as at risk in pre-test scores were identified as at risk in post-test scores. Within the original student distribution there were significant changes between at risk and not at risk at post-test (p < .0001). 39% of the original risk group were no longer at risk at post-test, while 61% remained at risk. These findings are summarized in Figure 4.10.

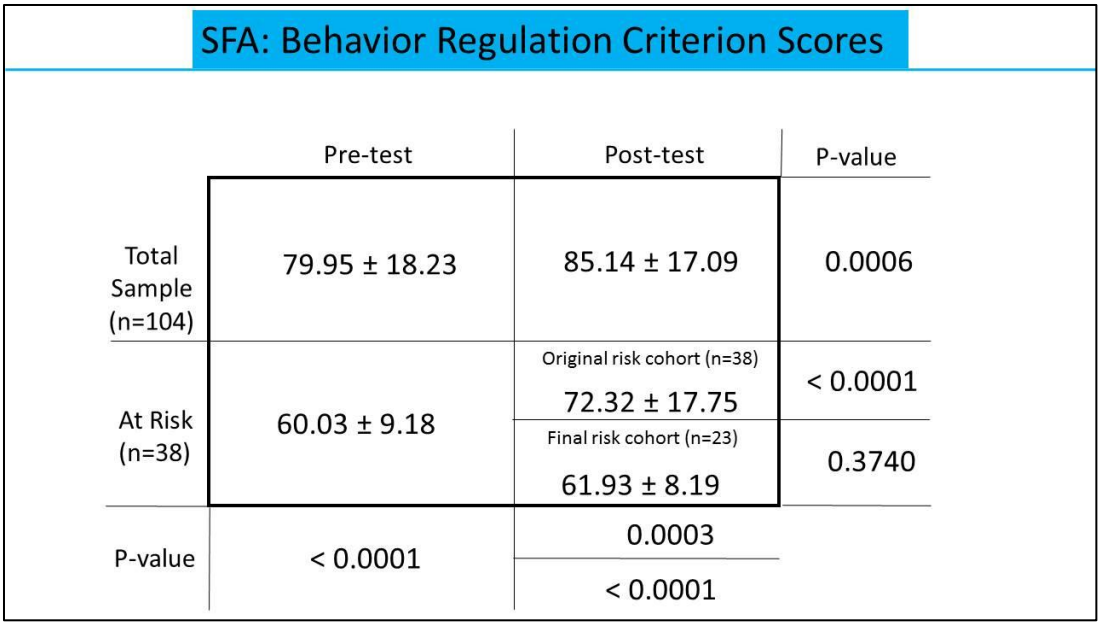


Figure 4.9 Behavior regulation mean criterion scores with standard deviations for the total sample and at risk cohort at pre-test and post-test. No significant change in scores for the original at risk cohort still identified as at risk at post-test.

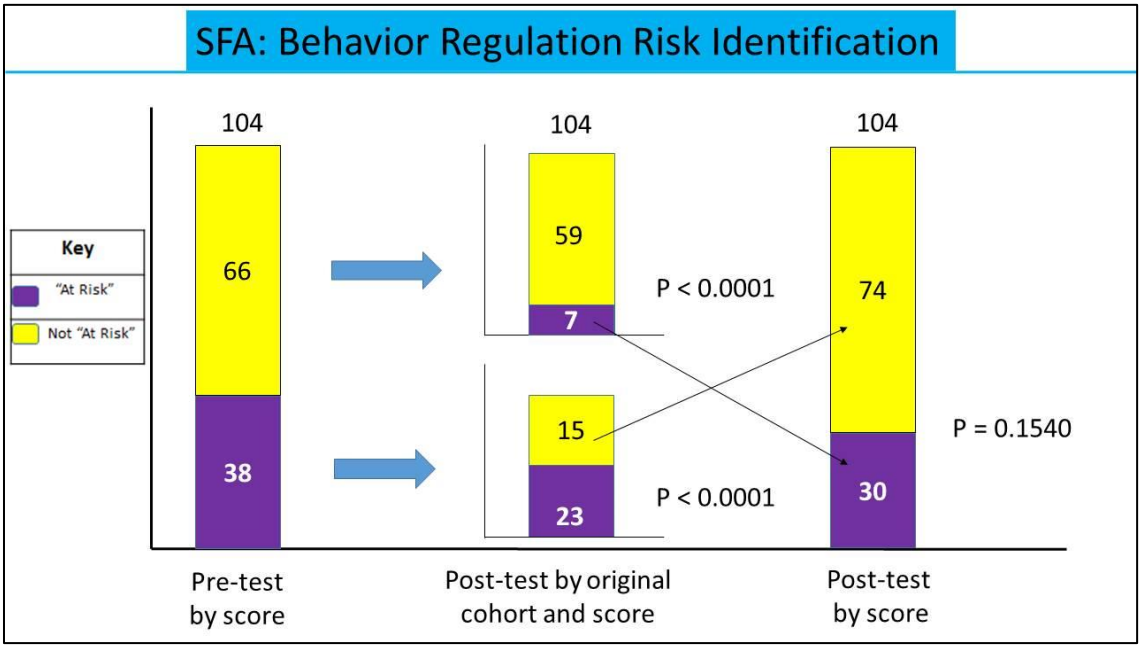


Figure 4.10 Behavior regulation frequency of risk identification between pre-test and post-test.

Personal Care Awareness

Personal care awareness includes the ability to monitor and maintain appearance, clean self, and rearrange clothing (Coster et al., 1998). The master panel reported that personal care awareness requires frequent prompting at the kindergarten level, but is something that increased independence is expected with by the transition to first grade.

For this category, the total sample (n = 104) showed a significant improvement in score (92.27 ± 11.14 vs. 97.16 ± 6.20, pre-test vs. post-test respectively, $p < .0001$). The original at risk cohort (n = 28) also showed a significant improvement in score (75.86 ± 7.84 vs. 93.25 ± 9.36, pre-test vs. post-test respectively, $p < .0001$), although the cohort remained significantly below the overall sample (97.16 ± 6.20 vs. 93.25 ± 9.36, total sample vs. original at risk cohort respectively, $p = .0441$). However, for this category, the mean post-test score for the original at risk cohort was higher than the mean pre-test score for the total sample (93.25 ± 9.36 vs. 92.27 ± 11.14, original at risk cohort vs. total sample respectively). Students in the original at risk cohort and still identified as at risk at post-test (n = 5) did not show a significant improvement in mean scores between pre-test and post-test (75.86 ± 7.84 vs. 78.42 ± 8.04, pre-test vs. post-test respectively, $p = .4661$). These data are summarized in Figure 4.11.

When looking at the overall student distribution between at risk and not at risk, the total sample showed a significant reduction in risk identification ($p < .0001$). There was a very high rate of improvement, with 82% of the original risk cohort no longer at risk at post-test, and only 18% of the original risk cohort still at risk at post-test. These data are summarized in Figure 4.12.

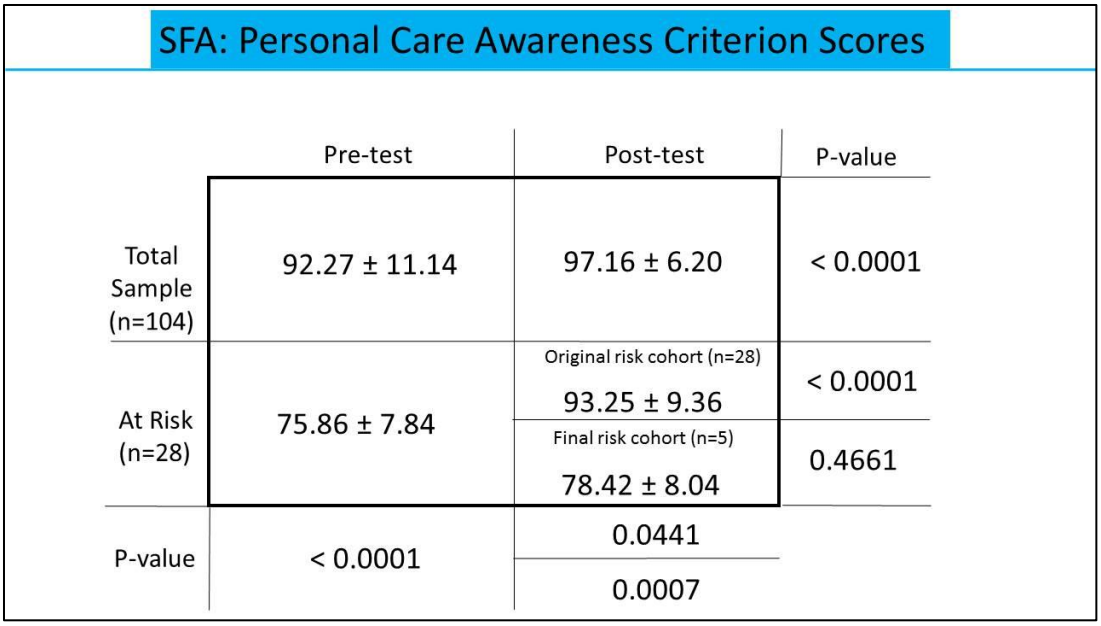


Figure 4.11 Personal care awareness mean criterion scores with standard deviations for the total sample and at risk cohort at pre-test and post-test. No significant change in scores for the original at risk cohort still identified as at risk at post-test.

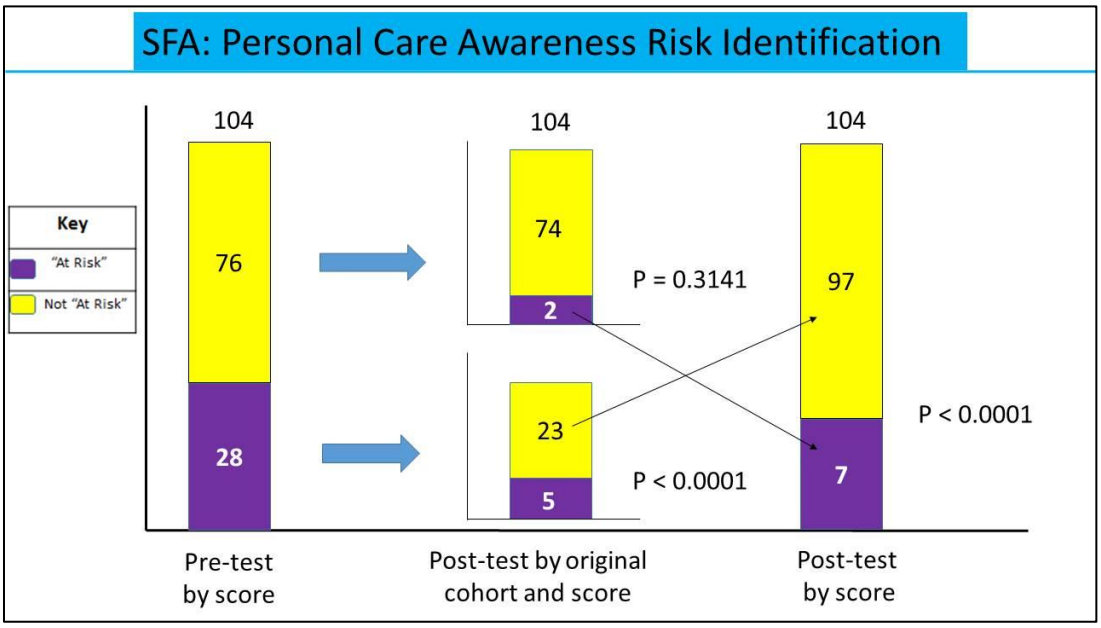


Figure 4.12 Personal care awareness frequency of risk identification between pre-test and post-test.

CHAPTER 5: DISCUSSION

The primary goal of this study was to evaluate if the Alert Program, when implemented as a tier one to tier two Response to Intervention (RTI) model in the kindergarten classroom, produces a preferential benefit in students identified as at risk for the selected *School Function Assessment-Part III Activity Performance: Cognitive/behavioral tasks* (SFA) categories.

Several years of previous research on the Alert Program carried out by East Carolina University's occupational therapy students under the direction of Dr. Carol Lust have primarily considered the effects of the program on sensory processing, as evaluated on the *Sensory Processing Measure-Main Classroom* (SPM-C). Additionally, this prior research has predominately focused on one year of data at a time, and because of the small numbers each year could only evaluate general effects on the entire class. In 2013, Monica Powell created an intention to treat stratification based on student's SPM-C scores. Powell (2013) selected SPM-C categories for the intention to treat stratification based on the areas of sensory processing she thought the Alert Program most intently targeted. Students scoring outside of the normative range were included in a tier three approach to the Alert Program.

What was done new or done differently this time? The focus of research has shifted from considering the effects of the Alert Program on sensory processing to the effects of the Alert Program on school function. Additionally, the research has become retrospective in nature, increasing the sample size from 1 year of student data to 4 years of data. The larger sample size allowed the data to be stratified and analyzed based on risk identification, yielding a more detailed and accurate evaluation of the program's effects on identified at risk students for each pre-selected category of the SFA. The SFA categories for the intention to treat stratification were selected based on feedback from a master panel comprised of faculty at The Oakwood

School including two kindergarten teachers, one first grade teacher, and one lower school coordinator. During the master panel discussions, questions about what areas are most developmentally appropriate and important for the kindergarten student or by the transition to first grade were used. Based on the outcome of those discussions, categories of the SFA were selected for use in retrospectively stratifying students who would have been considered at risk, based on their SFA pretest scores at the time of their participation in the Alert Program.

Several points worth noting arose from the expert panel. The SFA category following social conventions, including elements such as manners and respecting the privacy of others, was reported to be a school wide struggle and an area for which kindergarten students require frequent verbal prompting. The task/behavior completion category also was identified as a school-wide challenge; teachers want students to be risk takers and to independently try to solve problems. The category of positive interactions, which includes turn taking and listening to others in a group when they are speaking, was identified as an area of difficulty at the kindergarten level, particularly the part involving listening to others. The behavior regulation category, especially with regard to handling frustration appropriately, was said to be emphasized throughout several grade levels. In addition, the master panel commented that behavior regulation in particular is an area they would like to be addressed further. Lastly, the personal care awareness category, which includes topics such as hand hygiene and dressing oneself correctly, was identified as an area with which kindergarten teachers want students to become independent.

A review of the literature suggests that this study is one of the first demonstrations of using kindergarten teachers to identify school function categories that are important at the kindergarten level and could benefit from occupational therapy based intervention. The

literature suggests that kindergarten teachers predominately identify students at risk based on reading and math performance (Wanzek, Roberts, & Al Otaiba, 2014). However, there is literature recognizing the relationship between student behavioral characteristics and student learning outcomes (Wanzek et al., 2014). The literatures supports that teachers recognize those behavioral characteristics, such as hyperactivity and social skills, and are able to predict student academic outcomes (Wanzek et al., 2014).

Interpretation of Results

The five pre-selected SFA categories based on feedback from the master panel include: (1) following social conventions, (2) task/behavior completion, (3) positive interaction, (4) behavior regulation, and (5) personal care awareness.

How appropriate were these categories with regards to student needs at the kindergarten level? The selected categories were very appropriate; in fact, the categories accounted for five of the top six total SFA categories for frequency of students identified as at risk on the pre-test (see Figure 4.1). Of the total population, the most common category for a student at risk was positive interaction, with more than half (52%) of the students identified as at risk. This was identified by the master panel as an area of focus. The category with the next highest frequency of at risk identification was compliance with adult directives with about 47% of the students identified. This was the only category in the top six most frequent for risk not identified by the master panel. The remaining areas for risk frequency were behavior regulation (36%), task behavior/completion (34%), personal care awareness (26%), and following social conventions (24%). The high frequency of at risk students in the pre-selected categories confirms there is a need at the kindergarten level for these areas of school function to be addressed.

Given the evident need for school function to be addressed, is the SPM-C or the SFA a more sensitive approach for establishing risk, and therefore, intention to treat using a sensory based approach? Results revealed 87.5% of students identified as probable or definite risk on the pre-selected SPM-C categories chosen by Monica Powell in her 2013 thesis were also identified as at risk on the pre-selected SFA categories. In contrast, only 70.5% of students identified as at risk on the pre-selected SFA categories were also identified as at risk on the pre-selected SPM-C categories. The comparison suggests that difficulties in sensory processing more strongly relate to difficulties in school function than the other way around. Challenges in sensory processing have a high probability of predicting difficulties in school function, while difficulties in school function may be caused by a number of other issues unrelated to sensory processing (although the association still remains high at more than 70%, in the results). The data suggests that the SPM-C provides a more sensitive intention to treat stratification when the treatment method is based in the theory of sensory integration. Research by the American Occupational Therapy Association (2009b) supports the findings of this study, indicating that school function can be negatively impacted by difficulties with sensory processing. Perhaps supplemental questions related to a child's sensory processing can be given to teachers to increase SFA sensitivity; this could be a direction for future research.

Is it reasonable to expect that the Alert Program can remedy all risk concerns identified by the SFA? In this study, the performance of 29.5% of the students identified as at risk on the SFA likely was not caused by sensory processing and/or self-regulation difficulties. These are the students who were identified as at risk on the SFA and not at risk on the SPM-C. This finding indicates there are additional causes to difficulties related to school function that need to be addressed through means other than self-regulation and sensory processing.

Therefore, the Alert Program used as part of the RTI model is not intended nor expected to improve school function for every at risk student.

Although the Alert Program might not be the solution to all problems related to school function, how much of an impact did the program make? Specifically, for the original at risk cohort between pre-test and post-test for each of the pre-selected SFA categories, there was a significant reduction in risk identification and a significant improvement in the mean criterion scores. The majority of students who were originally not progressing with their peers were progressing with their peers after implementation of the Alert Program. The results of this study suggest school function for at risk students can be improved by addressing sensory processing and self-regulation through Alert Program sensorimotor activities.

Of the five pre-selected SFA categories, the greatest reduction in risk identification occurred in the category of personal care awareness followed by task/behavior completion, following social conventions, positive interaction, and lastly behavior regulation. Every category except behavior regulation experienced at least a 50% reduction in risk identification following the Alert Program. The results signify that the functional outcomes that can result from addressing sensory processing and self-regulation as suggested by Dr. Ayers (1979) did occur (see Figure 4.2).

What may have contributed to behavior regulation experiencing the smallest (40%) reduction in risk identification for those originally identified as at risk? The Alert Program is designed to improve an individual's ability to regulate behaviors by teaching one to recognize his or her arousal level and self-initiate modifications (Williams & Shellenberger, 1996). However, at the kindergarten level it is neither developmentally appropriate nor expected for one to be independent with this skill. For example, Raffaelli, Crockett, and Shen (2005) found in a

longitudinal study of 646 children that the skills for self-regulation continued to increase between early childhood (ages 4 to 5-years-old) and middle childhood (ages 8 to 9-years-old). Similarly, it is important to recall that the master panel reported behavior regulation as being an area in which independence is not emphasized until first grade. It is also worth noting when evaluating the program's impacts, that the SFA yields criterion scores that are compared to cut-off scores in order to establish risk. The cut-off scores encompass the kindergarten through third grade age group as a whole. Therefore, as established above, considering aspects of the category of behavior regulation are not developmentally appropriate at the kindergarten level, it is not surprising that such a large number of students remain at risk at the conclusion of kindergarten.

If aspects of behavior regulation may not be entirely developmentally appropriate at the kindergarten level, should it still serve as a category in the intention to treat stratification? Behavior regulation was identified as an area of need by the master panel. The category also ranked third in terms of frequency of students identified as at risk at pre-test, indicating a prevalent need for behavior regulation to be addressed. Furthermore, after implementation of the Alert Program, behavior regulation still did show a significant reduction in terms of risk identification. Perhaps however, in addition to the Alert Program, a more targeted and specialized intervention may be best to address students at risk in this category.

In contrast, what may have contributed to the category of personal care awareness experiencing the most significant improvement (82%) in terms of advancing at risk students to now be progressing with their peers? An analysis of the questions asked on the SFA in the personal care awareness category revealed an emphasis on sequencing and tactile registration and processing. Sequencing is supported well with the Alert Program, as the program helps individuals attain a *just right* arousal level in order to complete tasks or to appropriately

complete sequences required for tasks. Furthermore, the program supports tactile registration and processing through the use of sensorimotor activities with tactile components, such as bean bins, putty, and shaving cream. Supporting research suggests that autonomy in self-care is correlated with the ability to process multisensory information, as reported in a pilot study of the association between sensory, motor, and adaptive behaviors in children (Mattard-Lebrecque, Armor, & Couture, 2013). While the Alert Program certainly supports the development of skills required for personal care, another possible contributing factor is the exposure to personal care tasks and the emphasis on increasing independence with those tasks as part of the general kindergarten curriculum. Further evaluation of the influence of this confounding variable could not be completed due to the absence of a control group. It is likely, however, that both the Alert Program and the general kindergarten curriculum contributed to the significant score improvements.

Given the data supporting the benefits of the Alert Program for those at risk, are there negative implications for those not at risk when the program is implemented in the general classroom? Although a significant reduction in risk identification occurred in each of the five pre-selected SFA categories for the original at risk cohort between pre-test and post-test, a significant reduction in overall risk identification for the total sample of 104 students only occurred in three categories. The two categories that did not show a significant reduction in risk identification for the total sample were following social conventions and behavior regulation. Several possibilities emerge as potential explanations. One possibility is that participating in the Alert Program was harmful to those not at risk. However, there is no data in the Alert Program literature that supports the program producing negative impacts. For example, Mac Cobb et al. (2014) demonstrated positive outcomes when the Alert Program was implemented in the general

classroom at a school with social disadvantages; the study concluded with making recommendations for a whole school approach. A second possibility is that some areas of school function might take longer for challenges to be evident. However, the SFA has well-founded and validated age adjusted criteria for establishing risk cutoffs for each sub test (Coster et al., 1998; Davies et al., 2004; Hwang, Davies, Taylor, & Gavin, 2002). Remembering the previous differences noted above between the SFA and SPM-C predicting risk, another possibility is that the SFA generated a "false negative" pre-test risk identification in subsets of students. If the SFA yielded false negatives, perhaps the false negatives are more likely to occur in certain SFA categories.

Further examination of the data in the two categories that showed new risk at post-test reveals possible explanations for the changes and tends to support the false negative idea. First, in a review of the data for the following social conventions category, of the nine students who were originally classified as not at risk by the SFA pre-test and moved to at risk by the SFA post-test, eight (88.9%) were identified as probable or definite risk on the SPM-C pre-test, using the previously established SPM-C intention to treat stratification (Powell, 2013). A similar review of the behavior regulation subset of data reveals a comparable result. Six of the seven students (85.7%) originally classified as not at risk by the SFA pre-test, but as at risk by the SFA post-test, would have been identified as at risk on the SPM-C pre-test. It is clear then, that the majority of the false negative students already were identified, or could have been identified, as possibly having some difficulties with sensory processing.

A further evaluation of the questions asked in the SFA for scoring students for these two categories (following social conventions and behavior regulation), reveals a strong reliance on adequate sensory processing. For example, sensory processing is required to be able to accept

unexpected changes in routine, refrain from self-stimulation behaviors, handle frustration appropriately, and maintain appropriate physical boundaries and personal space (Coster et al., 1998). Perhaps as the challenges and demands of school increased throughout the year, their difficulties with school function secondary to sensory processing difficulties may have become more apparent for this subset of students. The literature supports this finding, indicating that the functional problems stemming from sensory processing difficulties often become more apparent in the transition to school (Miller & Summers, 2001). The data also might indicate that this subset reflects a cohort of at risk students that are more refractory to the Alert Program and might benefit from more directed interventions sooner, or at least a more individually tailored approach to the Alert Program. In fact, there is more to support such a premise.

Looking specifically at the scores for the students identified as at risk by pre-test and still at risk by post-test, only two out of the five pre-selected SFA categories experienced a significant improvement in mean criterion scores. The three categories without a significant improvement in mean scores were positive interaction, behavior regulation, and personal care awareness (see Figures 4.7, 4.9, and 4.11, respectively). For these categories, the students who were at risk at pre-test and still at risk at post-test, their scores were really not impacted by the Alert Program as a tier one to tier two RTI approach. Of these students, 84.8% of them were identified as at risk at post-test on both the SFA and the SPM-C intention to treat stratifications, suggesting underlying sensory processing difficulties in the majority. Perhaps these are students that would benefit from a more targeted tier two to tier three approach to address sensory processing as a means of improving school function.

Implications for Practice

The Alert Program, when used as a tier one to tier two RTI model, is designed to be implemented by teachers under the guidance of occupational therapists in the general classroom setting. As a means to increase teacher carryover of the program, school based occupational therapists can share with teachers the evidence supporting the impact of the Alert Program on school function for at risk students in the categories identified as most relevant at the kindergarten level. As teachers implement the program into general classroom settings, occupational therapists can then focus on identifying and supporting the students that need the more specialized and targeted tier two to tier three interventions through the RTI model.

Directions for future research include implementing a teacher led tier one to tier two Alert Program based intervention and collecting student outcome measurements as well as teacher feedback on ease of use and time commitments for the program. Additionally, future research could explore the effectiveness of a targeted tier two to tier three Alert Program based intervention on those students whose scores did not significantly improve at the tier one to tier two level.

Limitations

Due to the retrospective nature of this study, several limitations were expected. Challenges to reliability can be introduced by variances in the amount of teacher training on the correct use of the assessment instruments (SFA and SPM-C) from year-to-year. Variances in the Alert Program implementation from year to year with a new set of graduate students annually leading the program could also contribute. Also, over the previous 4 years, the two kindergarten classrooms each experienced changes in teaching staff, causing variances in assessment completion based on individual teacher's perspective. Countering the variances, the leading professor for the research has remained the same, adding a level of consistency and continuity to

the program implementation. Also, the annual findings for overall classroom performance with the Alert Program have been consistent form year to year.

Threats to internal validity exist due to the presence of confounding variables. In the absence of a control group (untreated, but age, and socioeconomically matched), the influence of typical development and the kindergarten curriculum on school function were not controlled for or eliminated. Further, demographic information was unavailable regarding the existence of any pre-existing diagnoses or whether students were currently receiving therapy services outside of The Oakwood School.

Additionally, the potential for rater bias existed because teachers completed the pre-test and post-test assessment forms and were present during Alert Program implementation, and encouraged to carryover aspects of the program day-to-day.

Limitations in the generalizability of the data exist since the sample for the study included kindergarten students from an independent private school in eastern North Carolina. There are likely cultural and socioeconomic factors that are unique to the sample population. Furthermore, being a private school, classroom activities and routines may have included more opportunities for day to day sensorimotor exploration than public school classrooms. Therefore, the results of the study should be generalized to other kindergarten classrooms with caution.

Conclusion

In conclusion, the Alert Program, a sensory-based approach to teaching self-regulation, yields end outcomes for at risk students in the most relevant areas of school function at the kindergarten level. However, while the classroom approach was effective for the majority of students, some students may benefit more from an individualized approach. The significant impact of the Alert Program on school function can be used to encourage teacher carryover

under the guidance of occupational therapists. Then, occupational therapists can focus on identifying and supporting the students needing a more targeted and individualized approach.

REFERENCES

American Occupational Therapy Association (2009a). AOTA critically appraised topics and papers series: What is the neurophysiologic evidence that using a sensory-based approach in occupational therapy with children and adolescents will be effective? Retrieved from http://www.aota.org/Educate/Research/CATsandCAPs/SI.aspx

American Occupational Therapy Association (2009b). AOTA critically appraised topics and papers series: What kinds of difficulties do children and adolescents with sensory processing disorders demonstrate in ADLs, IADLs, education, work/transition, play/leisure, and social participation. Retrieved from http://www.aota.org/Educate/Research/CATsandCAPs/SI.aspx

Ayers, A.J. (1972). *Sensory Integration and Learning Disorders*. Los Angeles, CA: Western Psychological Services.

Ayers, A.J. (1979). *Sensory Integration and the Child.* Los Angeles, CA: Western Psychological Services.

Barnes, K. J., Beck, A. J., Vogel, K. A., Grice, K. O., & Murphy, D. (2003). Perceptions regarding school-based occupational therapy for children with emotional disturbances. *American Journal of Occupational Therapy, 57*(3), 337-341. doi:10.5014/ajot.57.3.337

Barnes, K. J., Vogel, K. A., Beck, A. J., Schoenfeld, H. B., & Owen, S. V. (2008). Self-regulation strategies of children with emotional disturbance. *Physical & Occupational Therapy in Pediatrics, 28*(4), 369-387. doi:10.1080/01942630802307127

Barros, R. M., Silver, E. J., & Stein, R. E. (2009). School recess and group classroom behavior. *Pediatrics*, *123*(2), 431-436. doi:10.1542/peds.2007-2825

Ben-Sasson, A., Carter, A. S., & Briggs-Gowan, M. J. (2009). Sensory over-responsivity in elementary school: Prevalence and social-emotional correlates. *Journal of Abnormal Child Psychology, 37*(5), 705-716. doi:10.1007/s10802-008-9295-8

Blair, C., & Diamond, A. (2008). Biological processes in prevention and intervention: The promotion of self- regulation as a means of preventing school failure. *Development and Psychopathology, 20*(3), 899-911. doi:10.1017/S0954579408000436

Coster, W., Deeney, T., Haltiwanger, J., & Haley, S. (1998). *School function assessment SFA: User's manual*. San Antonio, TX: The Psychological Corporation.

Davies, P. L., Soon, P. L., Young, M., & Clausen-Yamaki, A. (2004). Validity and reliability of the school function assessment in elementary school students with disabilities. *Physical & Occupational Therapy in Pediatrics, 24*(3), 23-43. doi:10.1300/J006v24n03_03

Dewey, D., Kaplan, B. J., Crawford, S. G., & Wilson, B. N. (2002). Developmental coordination disorder: Associated problems in attention, learning, and psychosocial adjustment. *Human Movement Science, 21*(5), 905-918. doi:10.1016/S0167-9457(02)00163-X

Fedewa, A. L., & Erwin, H. E. (2011). Stability balls and students with attention and hyperactivity concerns: Implications for on-task and in-seat behavior. *The American Journal of Occupational Therapy*, *65*(4), 393-399. doi:10.5014/ajot.2011.000554

Hudson, J. & Reinecke, C. (2012). *Effectiveness of Implementing the Alert Program in the Kindergarten Classroom-Year Two* [PowerPoint slides].

Hwang, J., Davies, P. L., Taylor, M. P., & Gavin, W. J. (2002). Validation of school function assessment with elementary school children. *OTJR: Occupation, Participation and*

Health, *22*(2), 48-58. Retrieved from http://search.proquest.com.jproxy.lib.ecu.edu/docview/62302282?accountid=10639

Johnson, E., Mellard, D. F., Fuchs, D., & McKnight, M.A. (2006). *Responsiveness to intervention (RTI): How to do it.* Lawrence, KS: National Research Center on Learning Disabilities.

Kuhaneck, H. M., Henry, D. A., Glennon, T. J. (2007). *Sensory processing measure SPM: Main classroom and school environments forms*. Los Angeles, CA: Western Psychological Services.

Mac Cobb, S., Fitzgerald, B., Lanigan-O'Keeffe, C., Irwin, N., & Mellerick, N. (2014). Students with social, emotional, and behavioral difficulties: The Alert Program trial in post-primary schools. *Journal of Occupational Therapy, Schools, & Early Intervention*, *7*(2), 106-119. doi:10.1080/19411243.2014.930606

Mattard-Labrecque, C., Amor, L. B., & Couture, M. M. (2013). Children with autism and attention difficulties: a pilot study of the association between sensory, motor, and adaptive behaviors. *Journal of the Canadian Academy of Child and Adolescent Psychiatry*, *22*(2), 139. Retrieved from http://www-ncbi-nlm-nih-gov.jproxy.lib.ecu.edu/pmc/articles/PMC3647630/

Miller, L. J., & Summers, C. (2001). Clinical applications in sensory modulation dysfunction: Assessment and intervention considerations. In S. S. Roley, E. I. Blanch, & R. C. Schaaf (Eds.), Understanding the nature of sensory integration with diverse populations (pp. 247–274). San Antonio, TX: Therapy Skill Builders.

Powell, M. (2013). *Implementing the Alert Program for self-regulation through the response to intervention model with selected at risk children: Collaborating with elementary*

education teachers to identify effective strategies for improving students' readiness to learn (Master's thesis).

Raffaelli, M., Crockett, L. J., & Shen, Y. L. (2005). Developmental stability and change in self-regulation from childhood to adolescence. *The Journal of Genetic Psychology, 166*(1), 54-76. doi: 10.3200/GNTP.166.1.54-76

Reeder, D. L., Arnold, S. H., Jeffries, L. M., & McEwen, I. R. (2011). The role of occupational therapists and physical therapists in elementary school system early intervening services and response to intervention: A case report. *Physical & Occupational Therapy in Pediatrics, 31*(1), 44-57. doi:10.3109/01942638.2010.497180

Reynolds, S. & Lane, S. J. (2008). Diagnostic validity of sensory over-responsivity: A review of the literature and case reports. *Journal of Autism and Developmental Disorders, 38*(3), 516-529. doi:10.1007/s10803-007-0418-9

Rimm-Kaufman, S., Pianta, R. C., & Cox, M. (2001). Teachers' judgements of problems in the transition to school. *Early Childhood Research Quarterly, 15*(2), 147-166. doi:10.1016/S0885-2006(00)00049-1

Roley, S. S., Bissell, J., & Clark, G. F. (2008). Providing occupational therapy using sensory integration theory and methods in school-based practice. *The American Journal of Occupational Therapy, 63*(6), 823-842. Retrieved from http://search.proquest.com.jproxy.lib.ecu.edu/docview/231970710?pq-origsite=gscholar

Salls, J., & Bucey, J.C. (2003). Self-regulation strategies for middle school students. *OT Practice, 8*(5), 11-16. Retrieved from http://www.aota.org/Publications-News/otp.aspx

U.S. Department of Education (2000). *Twenty-second Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act.* Retrieved from

http://www2.ed.gov/about/reports/annual/osep/2000/index.html

VandenBerg, N. L. (2001). The use of a weighted vest to increase on-task behavior in children with attention difficulties. *The American Journal of Occupational Therapy*, *55*(6), 621-628. doi:10.5014/ajot.55.6.621

Wanzek, J., Roberts, G., & Al Otaiba, S. (2014). Academic responding during instruction and reading outcomes for kindergarten students at risk for reading difficulties. *Reading and Writing: An Interdisciplinary Journal, 27*(1), 55-78. Retrieved from http://search.proquest.com.jproxy.lib.ecu.edu/docview/1651861822?accountid=10639

Williams, M. S., & Shellenberger, S. (1996). *How does your engine run? A leader's guide to the Alert Program for self-regulation.* Albuquerque, NM: TherapyWorks.

Zeidler, S. (2012). Sensory processing challenges in the schools: Learning "high", "low", and "just right" speeds. *OT Practice, 17*(10), 14-19. Retrieved from http://www.aota.org/Publications-News/otp.aspx

APPENDIX A: IRB LETTER OF APPROVAL

EAST CAROLINA UNIVERSITY
University & Medical Center Institutional Review Board Office
4N-70 Brody Medical Sciences Building · Mail Stop 682
600 Moye Boulevard · Greenville, NC 27834
Office 252-744-2914 · Fax 252-744-2284 · www.ecu.edu/irb

Notification of Amendment Approval

From: Biomedical IRB
To: Carol Lust
CC:
Date: 3/10/2015
Re: Amd3: UMCIRB 10-0477
UMCIRB 10-0477
[IMPORTED] Implementing the Alert Program into a Kindergarten Curriculum Using the Response to Intervention (RtI) Model

Your Amendment was reviewed and approved using expedited review on 3/10/2015 . It was the determination of the UMCIRB Chairperson (or designee) that this revision does not impact the overall risk/benefit ratio of the study and is appropriate for the population and procedures proposed.

Please note that any further changes to this approved research may not be initiated without UMCIRB review except when necessary to eliminate an apparent immediate hazard to the participant. All unanticipated problems involving risks to participants and others must be promptly reported to the UMCIRB. Any continuing or final review must be submitted to the UMCIRB prior to the date of study expiration. The Investigator must adhere to all reporting requirements for this study.

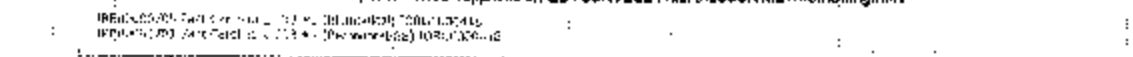
Approved consent documents with the IRB approval date stamped on the document should be used to consent participants (consent documents with the IRB approval date stamp are found under the Documents tab in the study workspace).

The approval includes the following terms:

Document	Description
parental permission for preschool (0.01)	Consent Forms
Research Proposal RtI - Alert - Oakwood final 2014-2015(0.06)	Study Protocol or Grant Application

Changes to Study Team/Personnel - removing Warner, Gibbs, King, Neeley and Powell from study team and adding Parker, Clarke, Petty and Hady

The Chairperson (or designee) does not have a potential for conflict of interest on this study.



APPENDIX B: EXAMPLE OF PARENTAL CONSENT FORM

Date:

Dear Kindergarten Parents

Students from Mr. Grabill's and Mrs. Strickland's class have been invited to participate in a study with East Carolina University's Department of Occupational Therapy. For five months, starting in September and ending in March, we would like your child to participate in weekly, small group Alert Program activities for 40 minutes. There may be additional opportunities for your child to do free choice follow-up activities individually 1-4 times a week during center time, transition time, recess time, and early morning time.

The Alert Program is an easy-to teach practical program that was developed by two occupational therapists to teach children to recognize their attention level or what will be referred to as an engine level for learning. A wide range of simple, low-budget strategies and activities that are sensorimotor based will be presented. With the help of the classroom teachers and Dr. Lust, your child will begin to determine which sensory strategies/activities he or she likes and will be most helpful in getting their "engine in gear" for learning. There will be adult supervision at all times. If your child asks not to participate in any Alert Program activity his or her wishes will be respected.

The study will ask the classroom teacher to rate your child's sensory abilities in September/ October and then again in February/March. Your child's teacher will fill out the "Sensory Processing Measure- Main Classroom Form and/or The Sensory Profile School Companion at the beginning of the study and at the end of the study. Your child's teacher will also rate your child's performance in cognitive and behavioral tasks using the School Functional Assessment near the end of the first and third marking period. All data will be kept confidential and locked in a file drawer in the Principal Investigator's office with limited outside access. Toward the end of the school year data findings will be shared with your school.

I am excited to have Dr. Lust and her graduate occupational therapy students back at Oakwood this year. The Alert Program will not disrupt our regular day and I believe the students will really enjoy it.

Please complete the attached permission form and return it to school no later than September _____. If you have any questions, please feel free to call Dr. Lust at W# 252-744-6193 or H# 252-756-3939.

Warm Regards,

Robert R. Peterson
Head of School

_____ **Yes,** my child _____ Birth date: _____

May participate in the 5 month, Alert Program being offered at the Oakwood School. I also give my permission for the classroom teachers to complete the *Sensory Processing Measure – Main Classroom Fo*rm and/or the *Sensory Profile School Companio*n plus the *School Functional Assessment – the Cognitive/Behavioral Task* section in September/October and again in February/March.

_____ **No,** my child _____

Will **not** participate in the 5 month, Alert Program being offered at the Oakwood School. I also do **not** give my permission for the classroom teachers to complete the *Sensory Processing Measure – Main Classroom* and/or the *Sensory Profile School Companion Form*, and the *School Functional Assessment – the Cognitive/Behavioral Task* section in September/October and again in February/March.

Parent signature: _____

Date: _____

APPENDIX C: SAMPLE OUTLINE OF A WEEKLY SESSION

Materials:

- sidewalk chalk
- place circles
- duct tape
- 2 bowling balls (4 lbs exercise balls)
- 10 bowling pins
- 8 scooter boards
- 4 half balls to use as markers
- 2 Ropes
- 4 large bolsters

Activity	Description	Sensorimotor Input
Class Activity #1	OT student leads "In the Middle Song." Children go into the middle in groups based on shirt color.	Visual, vestibular, auditory, proprioceptive
Class Activity #2	OT student introduces and leads "Boom Chicka Boom" with body motions.	Visual, vestibular, auditory, proprioceptive
Class Activity #3	Review alert levels and engine concept. Ask class to act out engine levels of high, low, and just right.	
Transition	Leaders start the "All Done" song. Class is divided into 4 small groups (3-4 children each, with one OT student per group). 2 groups go to Activity #1 while the other 2 groups go to Activity #2. The groups rotate so everyone will have a chance to do each activity.	
Small Group Activity #1	Sidewalk chalk and Scooter board *Sidewalk chalk:* • Activity will take place on sidewalk outside of classroom • Children draw picture to represent each engine level (prior to activity, leaders will divide sidewalk into 3 sections with chalk – high, low, just right) *Scooter board:* • Activity will take place on breezeway outside of children's classroom • First, OT student will sit on scooter board,	Visual, Tactile, Vestibular, Proprioceptive

	children will take turns pushing OT student through an obstacle course set up with half balls • Next, children all sit on a scooter in a single file line holding onto each other's shoulders, waist, rope, or feet to make a train. The OT student will pull the train of scooters. • Children will discuss how their engines feel before, during, and after activity	
Transition	"All Done Song"	
Small Group Activity #2	Weighted bowling • Uses a weighted ball and weighted two liter bottles as pins • Place 6 rubber floor circles in the pattern that the pins will be set-up for bowling • Children take turns setting up the pins and bowling	Proprioceptive
Transition	"All Done Song"	
Closing Activity #1	Each group discusses what aspects of the day's activities they liked best and how the activities made their engine feel.	
Closing Activity #2	While still in small groups, the children lay prone on the floor; each leader takes a bolster and rolls their group out like cookie or pizza dough, using deep pressure throughout. Lights should be dimmed.	Tactile-Deep Pressure
Transition	Return to the rug and sit down in a circle. Sing the "Goodbye Song" as a class.	

APPENDIX D: SFA COMPLETE DATA SPREADSHEET

SFA Following Social Conventions: A Pre-Selected Category								
ID Number	Gender	School Year	Class	Pre-Test Criterion	Pre-Test Cut-Off	Post-Test Criterion	Post-Test Cut-Off	Score Difference
1	F	2013-2014	Byers	100	73	100	73	0
2	F	2013-2014	Byers	100	73	100	73	0
3	F	2013-2014	Byers	83	73	70	73	-13
4	F	2013-2014	Byers	100	73	100	73	0
5	M	2013-2014	Byers	100	73	100	73	0
6	F	2013-2014	Byers	100	73	100	73	0
7	M	2013-2014	Byers	60	73	60	73	0
8	F	2013-2014	Byers	100	73	100	73	0
9	F	2013-2014	Byers	100	73	100	73	0
10	F	2013-2014	Byers	73	73	100	73	27
11	M	2013-2014	Byers	67	73	83	73	16
12	F	2013-2014	Byers	100	73	92	73	-8
13	M	2013-2014	Byers	100	73	92	73	-8
14	M	2013-2014	Byers	100	73	100	73	0
15	M	2013-2014	Byers	77	73	100	73	23
16	M	2013-2014	Byers	83	73	92	73	9
17	M	2013-2014	Byers	100	73	100	73	0
18	F	2013-2014	Strickland	83	73	100	73	17
19	F	2013-2014	Strickland	67	73	70	73	3
20	M	2013-2014	Strickland	92	73	92	73	0
21	M	2013-2014	Strickland	73	73	70	73	-3
22	F	2013-2014	Strickland	83	73	92	73	9
23	M	2013-2014	Strickland	83	73	83	73	0
24	M	2013-2014	Strickland	50	73	83	73	33
25	M	2013-2014	Strickland	83	73	92	73	9
26	M	2013-2014	Strickland	92	73	100	73	8
27	F	2013-2014	Strickland	83	73	83	73	0
28	M	2013-2014	Strickland	55	73	64	73	9
29	F	2013-2014	Strickland	77	73	70	73	-7
30	M	2013-2014	Strickland	77	73	92	73	15
31	M	2013-2014	Strickland	83	73	73	73	-10
32	M	2013-2014	Strickland	83	73	92	73	9
33	F	2013-2014	Strickland	73	73	67	73	-6
34	F	2012-2013	Byers	92	73	100	73	8
35	F	2012-2013	Byers	100	73	100	73	0
36	M	2012-2013	Byers	60	73	58	73	-2
37	M	2012-2013	Byers	100	73	100	73	0
38	F	2012-2013	Byers	67	73	92	73	25
39	M	2012-2013	Byers	57	73	60	73	3
40	F	2012-2013	Byers	100	73	100	73	0
41	F	2012-2013	Byers	100	73	100	73	0
42	F	2012-2013	Byers	100	73	100	73	0
43	M	2012-2013	Byers	77	73	77	73	0
44	F	2012-2013	Byers	100	73	100	73	0
45	F	2012-2013	Watson	77	73	92	73	15
46	F	2012-2013	Watson	77	73	100	73	23
47	M	2012-2013	Watson	83	73	62	73	-21
48	M	2012-2013	Watson	73	73	100	73	27
49	F	2012-2013	Watson	83	73	100	73	17
50	F	2012-2013	Watson	83	73	100	73	17
51	M	2012-2013	Watson	100	73	100	73	0
52	F	2012-2013	Watson	73	73	92	73	19
53	M	2012-2013	Watson	92	73	92	73	0

SFA Following Social Conventions: A Pre-Selected Category								
ID Number	Gender	School Year	Class	Pre-Test Criterion	Pre-Test Cut-Off	Post-Test Criterion	Post-Test Cut-Off	Score Difference
54	F	2011-2012	Byers	100	73	100	73	0
55	M	2011-2012	Byers	100	73	100	73	0
56	F	2011-2012	Byers	92	73	100	73	8
57	M	2011-2012	Byers	77	73	100	73	23
58	F	2011-2012	Byers	100	73	100	73	0
59	F	2011-2012	Byers	100	73	100	73	0
60	F	2011-2012	Byers	100	73	100	73	0
61	M	2011-2012	Byers	67	73	100	73	33
62	M	2011-2012	Byers	100	73	100	73	0
63	M	2011-2012	Byers	52	73	83	73	31
64	F	2011-2012	Byers	100	73	100	73	0
65	M	2011-2012	Byers	52	73	67	73	15
66	F	2011-2012	Watson	100	73	100	73	0
67	M	2011-2012	Watson	57	73	83	73	26
68	F	2011-2012	Watson	64	73	70	73	6
69	F	2011-2012	Watson	100	73	100	73	0
70	M	2011-2012	Watson	100	73	100	73	0
71	M	2011-2012	Watson	47	73	83	73	36
72	F	2011-2012	Watson	100	73	100	73	0
73	M	2011-2012	Watson	58	73	73	73	15
74	F	2011-2012	Watson	100	73	100	73	0
75	M	2011-2012	Watson	100	73	77	73	-23
76	M	2011-2012	Watson	57	73	70	73	13
77	F	2011-2012	Watson	100	73	92	73	-8
78	M	2010-2011	Byers	92	73	64	73	-28
79	F	2010-2011	Byers	62	73	100	73	38
80	M	2010-2011	Byers	100	73	100	73	0
81	F	2010-2011	Byers	70	73	100	73	30
82	F	2010-2011	Byers	100	73	100	73	0
83	M	2010-2011	Byers	100	73	100	73	0
84	M	2010-2011	Byers	83	73	100	73	17
85	F	2010-2011	Byers	100	73	100	73	0
86	F	2010-2011	Byers	100	73	100	73	0
87	M	2010-2011	Byers	73	73	64	73	-9
88	F	2010-2011	Byers	47	73	92	73	45
89	F	2010-2011	Byers	55	73	83	73	28
90	M	2010-2011	Byers	73	73	100	73	27
91	F	2010-2011	Byers	100	73	66	73	-34
92	M	2010-2011	Byers	62	73	100	73	38
93	M	2010-2011	Watson	100	73	100	73	0
94	M	2010-2011	Watson	100	73	83	73	-17
95	M	2010-2011	Watson	60	73	64	73	4
96	F	2010-2011	Watson	51	73	100	73	49
97	M	2010-2011	Watson	67	73	52	73	-15
98	F	2010-2011	Watson	100	73	100	73	0
99	F	2010-2011	Watson	100	73	100	73	0
100	F	2010-2011	Watson	100	73	100	73	0
101	F	2010-2011	Watson	100	73	100	73	0
102	F	2010-2011	Watson	100	73	64	73	-36
103	M	2010-2011	Watson	77	73	100	73	23
104	M	2010-2011	Watson	67	73	64	73	-3

SFA Task Behavior/Completion: A Pre-Selected Category								
ID Number	Gender	School Year	Class	Pre-Test Criterion	Pre-Test Cut-Off	Post-Test Criterion	Post-Test Cut-Off	Score Difference
1	F	2013-2014	Byers	100	72	100	72	0
2	F	2013-2014	Byers	100	72	100	72	0
3	F	2013-2014	Byers	72	72	81	72	9
4	F	2013-2014	Byers	100	72	100	72	0
5	M	2013-2014	Byers	100	72	100	72	0
6	F	2013-2014	Byers	94	72	84	72	-10
7	M	2013-2014	Byers	76	72	64	72	-12
8	F	2013-2014	Byers	94	72	100	72	6
9	F	2013-2014	Byers	84	72	100	72	16
10	F	2013-2014	Byers	100	72	100	72	0
11	M	2013-2014	Byers	56	72	61	72	5
12	F	2013-2014	Byers	100	72	94	72	-6
13	M	2013-2014	Byers	88	72	88	72	0
14	M	2013-2014	Byers	100	72	88	72	-12
15	M	2013-2014	Byers	81	72	100	72	19
16	M	2013-2014	Byers	66	72	71	72	5
17	M	2013-2014	Byers	100	72	100	72	0
18	F	2013-2014	Strickland	71	72	78	72	7
19	F	2013-2014	Strickland	76	72	88	72	12
20	M	2013-2014	Strickland	88	72	74	72	-14
21	M	2013-2014	Strickland	58	72	74	72	16
22	F	2013-2014	Strickland	78	72	84	72	6
23	M	2013-2014	Strickland	88	72	94	72	6
24	M	2013-2014	Strickland	76	72	81	72	5
25	M	2013-2014	Strickland	78	72	94	72	16
26	M	2013-2014	Strickland	84	72	100	72	16
27	F	2013-2014	Strickland	74	72	81	72	7
28	M	2013-2014	Strickland	56	72	66	72	10
29	F	2013-2014	Strickland	88	72	100	72	12
30	M	2013-2014	Strickland	88	72	72	72	-16
31	M	2013-2014	Strickland	66	72	67	72	1
32	M	2013-2014	Strickland	72	72	94	72	22
33	F	2013-2014	Strickland	71	72	84	72	13
34	F	2012-2013	Byers	71	72	88	72	17
35	F	2012-2013	Byers	100	72	94	72	-6
36	M	2012-2013	Byers	59	72	94	72	35
37	M	2012-2013	Byers	100	72	100	72	0
38	F	2012-2013	Byers	84	72	88	72	4
39	M	2012-2013	Byers	62	72	78	72	16
40	F	2012-2013	Byers	100	72	100	72	0
41	F	2012-2013	Byers	100	72	100	72	0
42	F	2012-2013	Byers	100	72	100	72	0
43	M	2012-2013	Byers	66	72	76	72	10
44	F	2012-2013	Byers	78	72	84	72	6
45	F	2012-2013	Watson	68	72	81	72	13
46	F	2012-2013	Watson	60	72	100	72	40
47	M	2012-2013	Watson	100	72	100	72	0
48	M	2012-2013	Watson	100	72	100	72	0
49	F	2012-2013	Watson	84	72	88	72	4
50	F	2012-2013	Watson	100	72	100	72	0
51	M	2012-2013	Watson	100	72	100	72	0
52	F	2012-2013	Watson	72	72	84	72	12
53	M	2012-2013	Watson	67	72	94	72	27

SFA Task Behavior/Completion: A Pre-Selected Category								
ID Number	Gender	School Year	Class	Pre-Test Criterion	Pre-Test Cut-Off	Post-Test Criterion	Post-Test Cut-Off	Score Difference
54	F	2011-2012	Byers	100	72	100	72	0
55	M	2011-2012	Byers	100	72	81	72	-19
56	F	2011-2012	Byers	100	72	100	72	0
57	M	2011-2012	Byers	100	72	72	72	-28
58	F	2011-2012	Byers	100	72	100	72	0
59	F	2011-2012	Byers	100	72	100	72	0
60	F	2011-2012	Byers	71	72	69	72	-2
61	M	2011-2012	Byers	62	72	94	72	32
62	M	2011-2012	Byers	81	72	100	72	19
63	M	2011-2012	Byers	45	72	100	72	55
64	F	2011-2012	Byers	94	72	94	72	0
65	M	2011-2012	Byers	51	72	71	72	20
66	F	2011-2012	Watson	100	72	100	72	0
67	M	2011-2012	Watson	60	72	84	72	24
68	F	2011-2012	Watson	61	72	72	72	11
69	F	2011-2012	Watson	100	72	78	72	-22
70	M	2011-2012	Watson	100	72	94	72	-6
71	M	2011-2012	Watson	59	72	67	72	8
72	F	2011-2012	Watson	100	72	100	72	0
73	M	2011-2012	Watson	40	72	45	72	5
74	F	2011-2012	Watson	100	72	100	72	0
75	M	2011-2012	Watson	100	72	76	72	-24
76	M	2011-2012	Watson	63	72	72	72	9
77	F	2011-2012	Watson	78	72	84	72	6
78	M	2010-2011	Byers	66	72	69	72	3
79	F	2010-2011	Byers	54	72	100	72	46
80	M	2010-2011	Byers	100	72	100	72	0
81	F	2010-2011	Byers	52	72	88	72	36
82	F	2010-2011	Byers	100	72	100	72	0
83	M	2010-2011	Byers	88	72	100	72	12
84	M	2010-2011	Byers	78	72	100	72	22
85	F	2010-2011	Byers	74	72	84	72	10
86	F	2010-2011	Byers	100	72	100	72	0
87	M	2010-2011	Byers	50	72	64	72	14
88	F	2010-2011	Byers	81	72	100	72	19
89	F	2010-2011	Byers	55	72	72	72	17
90	M	2010-2011	Byers	52	72	100	72	48
91	F	2010-2011	Byers	81	72	94	72	13
92	M	2010-2011	Byers	67	72	100	72	33
93	M	2010-2011	Watson	100	72	100	72	0
94	M	2010-2011	Watson	94	72	74	72	-20
95	M	2010-2011	Watson	52	72	60	72	8
96	F	2010-2011	Watson	34	72	49	72	15
97	M	2010-2011	Watson	63	72	64	72	1
98	F	2010-2011	Watson	100	72	100	72	0
99	F	2010-2011	Watson	100	72	100	72	0
100	F	2010-2011	Watson	100	72	100	72	0
101	F	2010-2011	Watson	100	72	100	72	0
102	F	2010-2011	Watson	61	72	55	72	-6
103	M	2010-2011	Watson	100	72	100	72	0
104	M	2010-2011	Watson	47	72	46	72	-1

SFA Positive Interaction: A Pre-Selected Category								
ID Number	Gender	School Year	Class	Pre-Test Criterion	Pre-Test Cut-Off	Post-Test Criterion	Post-Test Cut-Off	Score Difference
1	F	2013-2014	Byers	100	81	100	81	0
2	F	2013-2014	Byers	100	81	100	81	0
3	F	2013-2014	Byers	63	81	69	81	6
4	F	2013-2014	Byers	85	81	100	81	15
5	M	2013-2014	Byers	100	81	100	81	0
6	F	2013-2014	Byers	100	81	95	81	-5
7	M	2013-2014	Byers	71	81	62	81	-9
8	F	2013-2014	Byers	83	81	89	81	6
9	F	2013-2014	Byers	100	81	100	81	0
10	F	2013-2014	Byers	79	81	77	81	-2
11	M	2013-2014	Byers	62	81	67	81	5
12	F	2013-2014	Byers	89	81	79	81	-10
13	M	2013-2014	Byers	100	81	95	81	-5
14	M	2013-2014	Byers	100	81	100	81	0
15	M	2013-2014	Byers	76	81	100	81	24
16	M	2013-2014	Byers	89	81	100	81	11
17	M	2013-2014	Byers	100	81	100	81	0
18	F	2013-2014	Strickland	83	81	85	81	2
19	F	2013-2014	Strickland	69	81	72	81	3
20	M	2013-2014	Strickland	89	81	95	81	6
21	M	2013-2014	Strickland	70	81	81	81	11
22	F	2013-2014	Strickland	79	81	83	81	4
23	M	2013-2014	Strickland	83	81	79	81	-4
24	M	2013-2014	Strickland	79	81	85	81	6
25	M	2013-2014	Strickland	83	81	100	81	17
26	M	2013-2014	Strickland	85	81	100	81	15
27	F	2013-2014	Strickland	76	81	89	81	13
28	M	2013-2014	Strickland	56	81	69	81	13
29	F	2013-2014	Strickland	70	81	77	81	7
30	M	2013-2014	Strickland	85	81	83	81	-2
31	M	2013-2014	Strickland	73	81	77	81	4
32	M	2013-2014	Strickland	71	81	85	81	14
33	F	2013-2014	Strickland	72	81	81	81	9
34	F	2012-2013	Byers	73	81	95	81	22
35	F	2012-2013	Byers	74	81	85	81	11
36	M	2012-2013	Byers	64	81	74	81	10
37	M	2012-2013	Byers	100	81	100	81	0
38	F	2012-2013	Byers	70	81	76	81	6
39	M	2012-2013	Byers	53	81	81	81	28
40	F	2012-2013	Byers	100	81	100	81	0
41	F	2012-2013	Byers	100	81	100	81	0
42	F	2012-2013	Byers	72	81	85	81	13
43	M	2012-2013	Byers	72	81	95	81	23
44	F	2012-2013	Byers	100	81	100	81	0
45	F	2012-2013	Watson	69	81	100	81	31
46	F	2012-2013	Watson	81	81	100	81	19
47	M	2012-2013	Watson	100	81	100	81	0
48	M	2012-2013	Watson	74	81	100	81	26
49	F	2012-2013	Watson	83	81	100	81	17
50	F	2012-2013	Watson	79	81	100	81	21
51	M	2012-2013	Watson	100	81	100	81	0
52	F	2012-2013	Watson	95	81	100	81	5
53	M	2012-2013	Watson	71	81	89	81	18

SFA Positive Interaction: A Pre-Selected Category								
ID Number	Gender	School Year	Class	Pre-Test Criterion	Pre-Test Cut-Off	Post-Test Criterion	Post-Test Cut-Off	Score Difference
54	F	2011-2012	Byers	100	81	100	81	0
55	M	2011-2012	Byers	89	81	100	81	11
56	F	2011-2012	Byers	83	81	85	81	2
57	M	2011-2012	Byers	81	81	100	81	19
58	F	2011-2012	Byers	100	81	89	81	-11
59	F	2011-2012	Byers	77	81	95	81	18
60	F	2011-2012	Byers	83	81	95	81	12
61	M	2011-2012	Byers	79	81	89	81	10
62	M	2011-2012	Byers	79	81	100	81	21
63	M	2011-2012	Byers	47	81	69	81	22
64	F	2011-2012	Byers	89	81	81	81	-8
65	M	2011-2012	Byers	58	81	71	81	13
66	F	2011-2012	Watson	100	81	100	81	0
67	M	2011-2012	Watson	54	81	100	81	46
68	F	2011-2012	Watson	69	81	71	81	2
69	F	2011-2012	Watson	100	81	100	81	0
70	M	2011-2012	Watson	100	81	100	81	0
71	M	2011-2012	Watson	54	81	67	81	13
72	F	2011-2012	Watson	100	81	100	81	0
73	M	2011-2012	Watson	67	81	64	81	-3
74	F	2011-2012	Watson	100	81	100	81	0
75	M	2011-2012	Watson	100	81	89	81	-11
76	M	2011-2012	Watson	76	81	81	81	5
77	F	2011-2012	Watson	77	81	72	81	-5
78	M	2010-2011	Byers	65	81	70	81	5
79	F	2010-2011	Byers	58	81	73	81	15
80	M	2010-2011	Byers	89	81	100	81	11
81	F	2010-2011	Byers	60	81	100	81	40
82	F	2010-2011	Byers	100	81	100	81	0
83	M	2010-2011	Byers	85	81	95	81	10
84	M	2010-2011	Byers	76	81	100	81	24
85	F	2010-2011	Byers	77	81	81	81	4
86	F	2010-2011	Byers	100	81	100	81	0
87	M	2010-2011	Byers	58	81	69	81	11
88	F	2010-2011	Byers	52	81	89	81	37
89	F	2010-2011	Byers	62	81	89	81	27
90	M	2010-2011	Byers	58	81	83	81	25
91	F	2010-2011	Byers	73	81	95	81	22
92	M	2010-2011	Byers	71	81	100	81	29
93	M	2010-2011	Watson	100	81	100	81	0
94	M	2010-2011	Watson	74	81	72	81	-2
95	M	2010-2011	Watson	58	81	62	81	4
96	F	2010-2011	Watson	64	81	85	81	21
97	M	2010-2011	Watson	64	81	56	81	-8
98	F	2010-2011	Watson	100	81	100	81	0
99	F	2010-2011	Watson	95	81	83	81	-12
100	F	2010-2011	Watson	100	81	100	81	0
101	F	2010-2011	Watson	100	81	100	81	0
102	F	2010-2011	Watson	63	81	59	81	-4
103	M	2010-2011	Watson	100	81	100	81	0
104	M	2010-2011	Watson	68	81	71	81	3

SFA Behavior Regulation: A Pre-Selected Category								
ID Number	Gender	School Year	Class	Pre-Test Criterion	Pre-Test Cut-Off	Post-Test Criterion	Post-Test Cut-Off	Score Difference
1	F	2013-2014	Byers	100	74	100	74	0
2	F	2013-2014	Byers	100	74	100	74	0
3	F	2013-2014	Byers	63	74	52	74	-11
4	F	2013-2014	Byers	100	74	100	74	0
5	M	2013-2014	Byers	100	74	100	74	0
6	F	2013-2014	Byers	74	74	71	74	-3
7	M	2013-2014	Byers	59	74	50	74	-9
8	F	2013-2014	Byers	68	74	84	74	16
9	F	2013-2014	Byers	100	74	100	74	0
10	F	2013-2014	Byers	71	74	84	74	13
11	M	2013-2014	Byers	48	74	58	74	10
12	F	2013-2014	Byers	74	74	68	74	-6
13	M	2013-2014	Byers	92	74	74	74	-18
14	M	2013-2014	Byers	74	74	78	74	4
15	M	2013-2014	Byers	78	74	92	74	14
16	M	2013-2014	Byers	71	74	78	74	7
17	M	2013-2014	Byers	100	74	100	74	0
18	F	2013-2014	Strickland	84	74	74	74	-10
19	F	2013-2014	Strickland	71	74	63	74	-8
20	M	2013-2014	Strickland	100	74	100	74	0
21	M	2013-2014	Strickland	49	74	65	74	16
22	F	2013-2014	Strickland	84	74	68	74	-16
23	M	2013-2014	Strickland	63	74	63	74	0
24	M	2013-2014	Strickland	68	74	71	74	3
25	M	2013-2014	Strickland	92	74	100	74	8
26	M	2013-2014	Strickland	92	74	100	74	8
27	F	2013-2014	Strickland	78	74	100	74	22
28	M	2013-2014	Strickland	45	74	53	74	8
29	F	2013-2014	Strickland	74	74	63	74	-11
30	M	2013-2014	Strickland	92	74	74	74	-18
31	M	2013-2014	Strickland	100	74	100	74	0
32	M	2013-2014	Strickland	65	74	71	74	6
33	F	2013-2014	Strickland	63	74	50	74	-13
34	F	2012-2013	Byers	74	74	100	74	26
35	F	2012-2013	Byers	74	74	100	74	26
36	M	2012-2013	Byers	45	74	61	74	16
37	M	2012-2013	Byers	100	74	100	74	0
38	F	2012-2013	Byers	71	74	92	74	21
39	M	2012-2013	Byers	53	74	68	74	15
40	F	2012-2013	Byers	100	74	100	74	0
41	F	2012-2013	Byers	100	74	100	74	0
42	F	2012-2013	Byers	74	74	84	74	10
43	M	2012-2013	Byers	78	74	92	74	14
44	F	2012-2013	Byers	100	74	100	74	0
45	F	2012-2013	Watson	71	74	100	74	29
46	F	2012-2013	Watson	100	74	100	74	0
47	M	2012-2013	Watson	100	74	100	74	0
48	M	2012-2013	Watson	65	74	100	74	35
49	F	2012-2013	Watson	71	74	100	74	29
50	F	2012-2013	Watson	100	74	100	74	0
51	M	2012-2013	Watson	100	74	100	74	0
52	F	2012-2013	Watson	100	74	100	74	0
53	M	2012-2013	Watson	58	74	84	74	26

SFA Behavior Regulation: A Pre-Selected Category								
ID Number	Gender	School Year	Class	Pre-Test Criterion	Pre-Test Cut-Off	Post-Test Criterion	Post-Test Cut-Off	Score Difference
54	F	2011-2012	Byers	100	74	100	74	0
55	M	2011-2012	Byers	71	74	100	74	29
56	F	2011-2012	Byers	92	74	100	74	8
57	M	2011-2012	Byers	92	74	92	74	0
58	F	2011-2012	Byers	100	74	100	74	0
59	F	2011-2012	Byers	63	74	92	74	29
60	F	2011-2012	Byers	100	74	84	74	-16
61	M	2011-2012	Byers	65	74	100	74	35
62	M	2011-2012	Byers	63	74	100	74	37
63	M	2011-2012	Byers	46	74	63	74	17
64	F	2011-2012	Byers	100	74	84	74	-16
65	M	2011-2012	Byers	50	74	61	74	11
66	F	2011-2012	Watson	100	74	100	74	0
67	M	2011-2012	Watson	100	74	100	74	0
68	F	2011-2012	Watson	65	74	74	74	9
69	F	2011-2012	Watson	100	74	100	74	0
70	M	2011-2012	Watson	100	74	92	74	-8
71	M	2011-2012	Watson	52	74	63	74	11
72	F	2011-2012	Watson	100	74	100	74	0
73	M	2011-2012	Watson	58	74	58	74	0
74	F	2011-2012	Watson	100	74	100	74	0
75	M	2011-2012	Watson	100	74	100	74	0
76	M	2011-2012	Watson	71	74	84	74	13
77	F	2011-2012	Watson	92	74	68	74	-24
78	M	2010-2011	Byers	74	74	84	74	10
79	F	2010-2011	Byers	48	74	63	74	15
80	M	2010-2011	Byers	92	74	84	74	-8
81	F	2010-2011	Byers	92	74	100	74	8
82	F	2010-2011	Byers	100	74	100	74	0
83	M	2010-2011	Byers	74	74	100	74	26
84	M	2010-2011	Byers	84	74	100	74	16
85	F	2010-2011	Byers	74	74	71	74	-3
86	F	2010-2011	Byers	74	74	100	74	26
87	M	2010-2011	Byers	48	74	61	74	13
88	F	2010-2011	Byers	53	74	100	74	47
89	F	2010-2011	Byers	74	74	100	74	26
90	M	2010-2011	Byers	78	74	84	74	6
91	F	2010-2011	Byers	78	74	92	74	14
92	M	2010-2011	Byers	84	74	100	74	16
93	M	2010-2011	Watson	100	74	92	74	-8
94	M	2010-2011	Watson	92	74	68	74	-24
95	M	2010-2011	Watson	65	74	56	74	-9
96	F	2010-2011	Watson	49	74	63	74	14
97	M	2010-2011	Watson	56	74	68	74	12
98	F	2010-2011	Watson	100	74	100	74	0
99	F	2010-2011	Watson	100	74	74	74	-26
100	F	2010-2011	Watson	100	74	100	74	0
101	F	2010-2011	Watson	100	74	100	74	0
102	F	2010-2011	Watson	49	74	42	74	-7
103	M	2010-2011	Watson	100	74	100	74	0
104	M	2010-2011	Watson	71	74	48	74	-23

SFA Personal Care Awareness: A Pre-Selected Category								
ID Number	Gender	School Year	Class	Pre-Test Criterion	Pre-Test Cut-Off	Post-Test Criterion	Post-Test Cut-Off	Score Difference
1	F	2013-2014	Byers	100	92	100	92	0
2	F	2013-2014	Byers	100	92	100	92	0
3	F	2013-2014	Byers	100	92	100	92	0
4	F	2013-2014	Byers	100	92	100	92	0
5	M	2013-2014	Byers	100	92	100	92	0
6	F	2013-2014	Byers	73	92	100	92	27
7	M	2013-2014	Byers	100	92	100	92	0
8	F	2013-2014	Byers	100	92	100	92	0
9	F	2013-2014	Byers	100	92	100	92	0
10	F	2013-2014	Byers	100	92	100	92	0
11	M	2013-2014	Byers	83	92	100	92	17
12	F	2013-2014	Byers	100	92	100	92	0
13	M	2013-2014	Byers	100	92	100	92	0
14	M	2013-2014	Byers	100	92	100	92	0
15	M	2013-2014	Byers	100	92	100	92	0
16	M	2013-2014	Byers	83	92	100	92	17
17	M	2013-2014	Byers	100	92	100	92	0
18	F	2013-2014	Strickland	92	92	100	92	8
19	F	2013-2014	Strickland	83	92	83	92	0
20	M	2013-2014	Strickland	78	92	61	92	-17
21	M	2013-2014	Strickland	92	92	100	92	8
22	F	2013-2014	Strickland	92	92	100	92	8
23	M	2013-2014	Strickland	92	92	92	92	0
24	M	2013-2014	Strickland	92	92	100	92	8
25	M	2013-2014	Strickland	83	92	100	92	17
26	M	2013-2014	Strickland	92	92	100	92	8
27	F	2013-2014	Strickland	92	92	100	92	8
28	M	2013-2014	Strickland	83	92	100	92	17
29	F	2013-2014	Strickland	92	92	100	92	8
30	M	2013-2014	Strickland	83	92	100	92	17
31	M	2013-2014	Strickland	78	92	78	92	0
32	M	2013-2014	Strickland	92	92	92	92	0
33	F	2013-2014	Strickland	92	92	100	92	8
34	F	2012-2013	Byers	100	92	100	92	0
35	F	2012-2013	Byers	100	92	100	92	0
36	M	2012-2013	Byers	73	92	100	92	27
37	M	2012-2013	Byers	100	92	100	92	0
38	F	2012-2013	Byers	100	92	92	92	-8
39	M	2012-2013	Byers	100	92	92	92	-8
40	F	2012-2013	Byers	100	92	100	92	0
41	F	2012-2013	Byers	100	92	100	92	0
42	F	2012-2013	Byers	100	92	100	92	0
43	M	2012-2013	Byers	100	92	92	92	-8
44	F	2012-2013	Byers	100	92	100	92	0
45	F	2012-2013	Watson	73	92	92	92	19
46	F	2012-2013	Watson	100	92	100	92	0
47	M	2012-2013	Watson	100	92	92	92	-8
48	M	2012-2013	Watson	73	92	92	92	19
49	F	2012-2013	Watson	100	92	92	92	-8
50	F	2012-2013	Watson	100	92	100	92	0
51	M	2012-2013	Watson	100	92	100	92	0
52	F	2012-2013	Watson	100	92	100	92	0
53	M	2012-2013	Watson	100	92	92	92	-8

SFA Personal Care Awareness: A Pre-Selected Category								
ID Number	Gender	School Year	Class	Pre-Test Criterion	Pre-Test Cut-Off	Post-Test Criterion	Post-Test Cut-Off	Score Difference
54	F	2011-2012	Byers	100	92	100	92	0
55	M	2011-2012	Byers	100	92	92	92	-8
56	F	2011-2012	Byers	100	92	100	92	0
57	M	2011-2012	Byers	100	92	100	92	0
58	F	2011-2012	Byers	100	92	100	92	0
59	F	2011-2012	Byers	100	92	100	92	0
60	F	2011-2012	Byers	100	92	100	92	0
61	M	2011-2012	Byers	100	92	100	92	0
62	M	2011-2012	Byers	92	92	100	92	8
63	M	2011-2012	Byers	92	92	100	92	8
64	F	2011-2012	Byers	100	92	100	92	0
65	M	2011-2012	Byers	83	92	100	92	17
66	F	2011-2012	Watson	100	92	100	92	0
67	M	2011-2012	Watson	57	92	92	92	35
68	F	2011-2012	Watson	100	92	100	92	0
69	F	2011-2012	Watson	100	92	100	92	0
70	M	2011-2012	Watson	78	92	100	92	22
71	M	2011-2012	Watson	100	92	100	92	0
72	F	2011-2012	Watson	100	92	100	92	0
73	M	2011-2012	Watson	100	92	83	92	-17
74	F	2011-2012	Watson	100	92	100	92	0
75	M	2011-2012	Watson	100	92	100	92	0
76	M	2011-2012	Watson	100	92	100	92	0
77	F	2011-2012	Watson	100	92	100	92	0
78	M	2010-2011	Byers	83	92	92	92	9
79	F	2010-2011	Byers	83	92	100	92	17
80	M	2010-2011	Byers	92	92	100	92	8
81	F	2010-2011	Byers	92	92	100	92	8
82	F	2010-2011	Byers	100	92	100	92	0
83	M	2010-2011	Byers	100	92	100	92	0
84	M	2010-2011	Byers	67	92	92	92	25
85	F	2010-2011	Byers	92	92	100	92	8
86	F	2010-2011	Byers	73	92	100	92	27
87	M	2010-2011	Byers	73	92	92	92	19
88	F	2010-2011	Byers	60	92	92	92	32
89	F	2010-2011	Byers	78	92	92	92	14
90	M	2010-2011	Byers	62	92	78	92	16
91	F	2010-2011	Byers	92	92	100	92	8
92	M	2010-2011	Byers	83	92	92	92	9
93	M	2010-2011	Watson	100	92	100	92	0
94	M	2010-2011	Watson	100	92	100	92	0
95	M	2010-2011	Watson	64	92	100	92	36
96	F	2010-2011	Watson	78	92	83	92	5
97	M	2010-2011	Watson	73	92	100	92	27
98	F	2010-2011	Watson	100	92	100	92	0
99	F	2010-2011	Watson	100	92	100	92	0
100	F	2010-2011	Watson	100	92	100	92	0
101	F	2010-2011	Watson	100	92	100	92	0
102	F	2010-2011	Watson	100	92	83	92	-17
103	M	2010-2011	Watson	100	92	100	92	0
104	M	2010-2011	Watson	83	92	100	92	17

SFA Functional Communication: Not a Pre-Selected Category								
ID Number	Gender	School Year	Class	Pre-Test Criterion	Pre-Test Cut-Off	Post-Test Criterion	Post-test Cut-Off	Score Difference
1	F	2013-2014	Byers	100	91	100	91	0
2	F	2013-2014	Byers	100	91	100	91	0
3	F	2013-2014	Byers	100	91	100	91	0
4	F	2013-2014	Byers	100	91	100	91	0
5	M	2013-2014	Byers	100	91	100	91	0
6	F	2013-2014	Byers	100	91	100	91	0
7	M	2013-2014	Byers	100	91	91	91	-9
8	F	2013-2014	Byers	100	91	100	91	0
9	F	2013-2014	Byers	100	91	100	91	0
10	F	2013-2014	Byers	100	91	100	91	0
11	M	2013-2014	Byers	100	91	100	91	0
12	F	2013-2014	Byers	100	91	100	91	0
13	M	2013-2014	Byers	100	91	100	91	0
14	M	2013-2014	Byers	100	91	100	91	0
15	M	2013-2014	Byers	100	91	100	91	0
16	M	2013-2014	Byers	100	91	100	91	0
17	M	2013-2014	Byers	100	91	100	91	0
18	F	2013-2014	Strickland	81	91	76	91	-5
19	F	2013-2014	Strickland	69	91	81	91	12
20	M	2013-2014	Strickland	76	91	81	91	5
21	M	2013-2014	Strickland	100	91	100	91	0
22	F	2013-2014	Strickland	100	91	76	91	-24
23	M	2013-2014	Strickland	100	91	100	91	0
24	M	2013-2014	Strickland	91	91	91	91	0
25	M	2013-2014	Strickland	81	91	91	91	10
26	M	2013-2014	Strickland	91	91	91	91	0
27	F	2013-2014	Strickland	91	91	81	91	-10
28	M	2013-2014	Strickland	76	91	81	91	5
29	F	2013-2014	Strickland	100	91	100	91	0
30	M	2013-2014	Strickland	81	91	81	91	0
31	M	2013-2014	Strickland	91	91	76	91	-15
32	M	2013-2014	Strickland	100	91	100	91	0
33	F	2013-2014	Strickland	100	91	81	91	-19
34	F	2012-2013	Byers	100	91	100	91	0
35	F	2012-2013	Byers	100	91	100	91	0
36	M	2012-2013	Byers	100	91	100	91	0
37	M	2012-2013	Byers	100	91	100	91	0
38	F	2012-2013	Byers	100	91	100	91	0
39	M	2012-2013	Byers	100	91	100	91	0
40	F	2012-2013	Byers	100	91	100	91	0
41	F	2012-2013	Byers	100	91	100	91	0
42	F	2012-2013	Byers	100	91	100	91	0
43	M	2012-2013	Byers	91	91	100	91	9
44	F	2012-2013	Byers	100	91	100	91	0
45	F	2012-2013	Watson	100	91	100	91	0
46	F	2012-2013	Watson	100	91	100	91	0
47	M	2012-2013	Watson	100	91	100	91	0
48	M	2012-2013	Watson	100	91	100	91	0
49	F	2012-2013	Watson	100	91	100	91	0
50	F	2012-2013	Watson	100	91	100	91	0
51	M	2012-2013	Watson	100	91	100	91	0
52	F	2012-2013	Watson	100	91	100	91	0
53	M	2012-2013	Watson	100	91	100	91	0

SFA Functional Communication: Not a Pre-Selected Category								
ID Number	Gender	School Year	Class	Pre-Test Criterion	Pre-Test Cut-Off	Post-Test Criterion	Post-test Cut-Off	Score Difference
54	F	2011-2012	Byers	100	91	100	91	0
55	M	2011-2012	Byers	100	91	91	91	-9
56	F	2011-2012	Byers	100	91	100	91	0
57	M	2011-2012	Byers	91	91	100	91	9
58	F	2011-2012	Byers	100	91	100	91	0
59	F	2011-2012	Byers	100	91	100	91	0
60	F	2011-2012	Byers	76	91	100	91	24
61	M	2011-2012	Byers	100	91	100	91	0
62	M	2011-2012	Byers	100	91	100	91	0
63	M	2011-2012	Byers	100	91	100	91	0
64	F	2011-2012	Byers	100	91	100	91	0
65	M	2011-2012	Byers	91	91	100	91	9
66	F	2011-2012	Watson	100	91	100	91	0
67	M	2011-2012	Watson	46	91	81	91	35
68	F	2011-2012	Watson	100	91	100	91	0
69	F	2011-2012	Watson	100	91	100	91	0
70	M	2011-2012	Watson	100	91	100	91	0
71	M	2011-2012	Watson	100	91	100	91	0
72	F	2011-2012	Watson	100	91	100	91	0
73	M	2011-2012	Watson	100	91	81	91	-19
74	F	2011-2012	Watson	100	91	100	91	0
75	M	2011-2012	Watson	100	91	100	91	0
76	M	2011-2012	Watson	76	91	100	91	24
77	F	2011-2012	Watson	100	91	100	91	0
78	M	2010-2011	Byers	100	91	100	91	0
79	F	2010-2011	Byers	100	91	100	91	0
80	M	2010-2011	Byers	100	91	100	91	0
81	F	2010-2011	Byers	66	91	100	91	34
82	F	2010-2011	Byers	100	91	100	91	0
83	M	2010-2011	Byers	100	91	100	91	0
84	M	2010-2011	Byers	35	91	91	91	56
85	F	2010-2011	Byers	100	91	100	91	0
86	F	2010-2011	Byers	100	91	100	91	0
87	M	2010-2011	Byers	100	91	100	91	0
88	F	2010-2011	Byers	54	91	100	91	46
89	F	2010-2011	Byers	51	91	66	91	15
90	M	2010-2011	Byers	45	91	100	91	55
91	F	2010-2011	Byers	100	91	100	91	0
92	M	2010-2011	Byers	100	91	100	91	0
93	M	2010-2011	Watson	100	91	100	91	0
94	M	2010-2011	Watson	100	91	100	91	0
95	M	2010-2011	Watson	100	91	100	91	0
96	F	2010-2011	Watson	55	91	76	91	21
97	M	2010-2011	Watson	91	91	91	91	0
98	F	2010-2011	Watson	100	91	100	91	0
99	F	2010-2011	Watson	100	91	100	91	0
100	F	2010-2011	Watson	100	91	100	91	0
101	F	2010-2011	Watson	100	91	100	91	0
102	F	2010-2011	Watson	100	91	100	91	0
103	M	2010-2011	Watson	100	91	100	91	0
104	M	2010-2011	Watson	69	91	91	91	22

SFA Memory and Understanding: Not a Pre-Selected Category								
ID Number	Gender	School Year	Class	Pre-Test Criterion	Pre-Test Cut-Off	Post-Test Criterion	Post-Test Cut-Off	Score Difference
1	F	2013-2014	Byers	100	79	100	79	0
2	F	2013-2014	Byers	100	79	100	79	0
3	F	2013-2014	Byers	100	79	100	79	0
4	F	2013-2014	Byers	100	79	100	79	0
5	M	2013-2014	Byers	100	79	100	79	0
6	F	2013-2014	Byers	100	79	100	79	0
7	M	2013-2014	Byers	100	79	85	79	-15
8	F	2013-2014	Byers	93	79	100	79	7
9	F	2013-2014	Byers	100	79	100	79	0
10	F	2013-2014	Byers	100	79	100	79	0
11	M	2013-2014	Byers	85	79	93	79	8
12	F	2013-2014	Byers	100	79	100	79	0
13	M	2013-2014	Byers	100	79	93	79	-7
14	M	2013-2014	Byers	100	79	100	79	0
15	M	2013-2014	Byers	93	79	100	79	7
16	M	2013-2014	Byers	100	79	85	79	-15
17	M	2013-2014	Byers	100	79	100	79	0
18	F	2013-2014	Strickland	67	79	79	79	12
19	F	2013-2014	Strickland	74	79	79	79	5
20	M	2013-2014	Strickland	79	79	79	79	0
21	M	2013-2014	Strickland	85	79	100	79	15
22	F	2013-2014	Strickland	74	79	85	79	11
23	M	2013-2014	Strickland	85	79	100	79	15
24	M	2013-2014	Strickland	85	79	74	79	-11
25	M	2013-2014	Strickland	79	79	100	79	21
26	M	2013-2014	Strickland	79	79	93	79	14
27	F	2013-2014	Strickland	74	79	93	79	19
28	M	2013-2014	Strickland	62	79	79	79	17
29	F	2013-2014	Strickland	85	79	100	79	15
30	M	2013-2014	Strickland	70	79	79	79	9
31	M	2013-2014	Strickland	85	79	93	79	8
32	M	2013-2014	Strickland	85	79	100	79	15
33	F	2013-2014	Strickland	79	79	85	79	6
34	F	2012-2013	Byers	100	79	100	79	0
35	F	2012-2013	Byers	100	79	100	79	0
36	M	2012-2013	Byers	74	79	67	79	-7
37	M	2012-2013	Byers	100	79	100	79	0
38	F	2012-2013	Byers	100	79	100	79	0
39	M	2012-2013	Byers	79	79	79	79	0
40	F	2012-2013	Byers	100	79	100	79	0
41	F	2012-2013	Byers	100	79	100	79	0
42	F	2012-2013	Byers	100	79	100	79	0
43	M	2012-2013	Byers	74	79	79	79	5
44	F	2012-2013	Byers	100	79	100	79	0
45	F	2012-2013	Watson	93	79	100	79	7
46	F	2012-2013	Watson	65	79	100	79	35
47	M	2012-2013	Watson	100	79	100	79	0
48	M	2012-2013	Watson	100	79	100	79	0
49	F	2012-2013	Watson	74	79	100	79	26
50	F	2012-2013	Watson	100	79	100	79	0
51	M	2012-2013	Watson	100	79	100	79	0
52	F	2012-2013	Watson	100	79	100	79	0
53	M	2012-2013	Watson	70	79	100	79	30

SFA Memory and Understanding: Not a Pre-Selected Category								
ID Number	Gender	School Year	Class	Pre-Test Criterion	Pre-Test Cut-Off	Post-Test Criterion	Post-Test Cut-Off	Score Difference
54	F	2011-2012	Byers	100	79	100	79	0
55	M	2011-2012	Byers	100	79	93	79	-7
56	F	2011-2012	Byers	100	79	100	79	0
57	M	2011-2012	Byers	93	79	85	79	-8
58	F	2011-2012	Byers	100	79	100	79	0
59	F	2011-2012	Byers	100	79	100	79	0
60	F	2011-2012	Byers	70	79	100	79	30
61	M	2011-2012	Byers	100	79	100	79	0
62	M	2011-2012	Byers	100	79	100	79	0
63	M	2011-2012	Byers	79	79	93	79	14
64	F	2011-2012	Byers	100	79	100	79	0
65	M	2011-2012	Byers	100	79	93	79	-7
66	F	2011-2012	Watson	100	79	100	79	0
67	M	2011-2012	Watson	54	79	85	79	31
68	F	2011-2012	Watson	74	79	74	79	0
69	F	2011-2012	Watson	100	79	93	79	-7
70	M	2011-2012	Watson	100	79	100	79	0
71	M	2011-2012	Watson	67	79	93	79	26
72	F	2011-2012	Watson	100	79	100	79	0
73	M	2011-2012	Watson	30	79	65	79	35
74	F	2011-2012	Watson	100	79	100	79	0
75	M	2011-2012	Watson	100	79	85	79	-15
76	M	2011-2012	Watson	62	79	79	79	17
77	F	2011-2012	Watson	100	79	85	79	-15
78	M	2010-2011	Byers	93	79	79	79	-14
79	F	2010-2011	Byers	93	79	100	79	7
80	M	2010-2011	Byers	100	79	100	79	0
81	F	2010-2011	Byers	56	79	100	79	44
82	F	2010-2011	Byers	100	79	100	79	0
83	M	2010-2011	Byers	100	79	93	79	-7
84	M	2010-2011	Byers	74	79	100	79	26
85	F	2010-2011	Byers	100	79	100	79	0
86	F	2010-2011	Byers	100	79	100	79	0
87	M	2010-2011	Byers	65	79	70	79	5
88	F	2010-2011	Byers	93	79	85	79	-8
89	F	2010-2011	Byers	79	79	100	79	21
90	M	2010-2011	Byers	46	79	100	79	54
91	F	2010-2011	Byers	100	79	100	79	0
92	M	2010-2011	Byers	100	79	100	79	0
93	M	2010-2011	Watson	100	79	100	79	0
94	M	2010-2011	Watson	100	79	100	79	0
95	M	2010-2011	Watson	100	79	79	79	-21
96	F	2010-2011	Watson	46	79	65	79	19
97	M	2010-2011	Watson	79	79	85	79	6
98	F	2010-2011	Watson	100	79	67	79	-33
99	F	2010-2011	Watson	100	79	93	79	-7
100	F	2010-2011	Watson	100	79	100	79	0
101	F	2010-2011	Watson	100	79	100	79	0
102	F	2010-2011	Watson	100	79	85	79	-15
103	M	2010-2011	Watson	100	79	100	79	0
104	M	2010-2011	Watson	43	79	43	79	0

SFA Compliance with Adult Directives: Not a Pre-Selected Category								
ID Number	Gender	School Year	Class	Pre-Test Criterion	Pre-Test Cut-Off	Post-Test Criterion	Post-Test Cut-Off	Score Difference
1	F	2013-2014	Byers	100	76	100	76	0
2	F	2013-2014	Byers	93	76	100	76	7
3	F	2013-2014	Byers	71	76	64	76	-7
4	F	2013-2014	Byers	82	76	100	76	18
5	M	2013-2014	Byers	100	76	100	76	0
6	F	2013-2014	Byers	82	76	73	76	-9
7	M	2013-2014	Byers	67	76	58	76	-9
8	F	2013-2014	Byers	82	76	82	76	0
9	F	2013-2014	Byers	100	76	100	76	0
10	F	2013-2014	Byers	82	76	100	76	18
11	M	2013-2014	Byers	53	76	64	76	11
12	F	2013-2014	Byers	100	76	86	76	-14
13	M	2013-2014	Byers	71	76	82	76	11
14	M	2013-2014	Byers	93	76	100	76	7
15	M	2013-2014	Byers	69	76	100	76	31
16	M	2013-2014	Byers	73	76	82	76	9
17	M	2013-2014	Byers	93	76	100	76	7
18	F	2013-2014	Strickland	82	76	86	76	4
19	F	2013-2014	Strickland	71	76	78	76	7
20	M	2013-2014	Strickland	93	76	86	76	-7
21	M	2013-2014	Strickland	59	76	73	76	14
22	F	2013-2014	Strickland	82	76	93	76	11
23	M	2013-2014	Strickland	78	76	100	76	22
24	M	2013-2014	Strickland	73	76	82	76	9
25	M	2013-2014	Strickland	76	76	100	76	24
26	M	2013-2014	Strickland	82	76	100	76	18
27	F	2013-2014	Strickland	71	76	82	76	11
28	M	2013-2014	Strickland	56	76	64	76	8
29	F	2013-2014	Strickland	73	76	78	76	5
30	M	2013-2014	Strickland	76	76	78	76	2
31	M	2013-2014	Strickland	67	76	76	76	9
32	M	2013-2014	Strickland	76	76	100	76	24
33	F	2013-2014	Strickland	67	76	78	76	11
34	F	2012-2013	Byers	57	76	71	76	14
35	F	2012-2013	Byers	82	76	93	76	11
36	M	2012-2013	Byers	42	76	64	76	22
37	M	2012-2013	Byers	100	76	100	76	0
38	F	2012-2013	Byers	71	76	86	76	15
39	M	2012-2013	Byers	46	76	61	76	15
40	F	2012-2013	Byers	100	76	100	76	0
41	F	2012-2013	Byers	100	76	100	76	0
42	F	2012-2013	Byers	100	76	93	76	-7
43	M	2012-2013	Byers	57	76	93	76	36
44	F	2012-2013	Byers	100	76	100	76	0
45	F	2012-2013	Watson	62	76	100	76	38
46	F	2012-2013	Watson	64	76	100	76	36
47	M	2012-2013	Watson	100	76	62	76	-38
48	M	2012-2013	Watson	71	76	100	76	29
49	F	2012-2013	Watson	86	76	100	76	14
50	F	2012-2013	Watson	78	76	100	76	22
51	M	2012-2013	Watson	100	76	100	76	0
52	F	2012-2013	Watson	73	76	100	76	27
53	M	2012-2013	Watson	56	76	93	76	37

SFA Compliance with Adult Directives: Not a Pre-Selected Category								
ID Number	Gender	School Year	Class	Pre-Test Criterion	Pre-Test Cut-Off	Post-Test Criterion	Post-Test Cut-Off	Score Difference
54	F	2011-2012	Byers	100	76	100	76	0
55	M	2011-2012	Byers	100	76	86	76	-14
56	F	2011-2012	Byers	93	76	100	76	7
57	M	2011-2012	Byers	93	76	100	76	7
58	F	2011-2012	Byers	100	76	100	76	0
59	F	2011-2012	Byers	65	76	100	76	35
60	F	2011-2012	Byers	69	76	93	76	24
61	M	2011-2012	Byers	59	76	93	76	34
62	M	2011-2012	Byers	86	76	93	76	7
63	M	2011-2012	Byers	43	76	65	76	22
64	F	2011-2012	Byers	100	76	86	76	-14
65	M	2011-2012	Byers	42	76	64	76	22
66	F	2011-2012	Watson	100	76	93	76	-7
67	M	2011-2012	Watson	56	76	93	76	37
68	F	2011-2012	Watson	67	76	65	76	-2
69	F	2011-2012	Watson	100	76	100	76	0
70	M	2011-2012	Watson	100	76	100	76	0
71	M	2011-2012	Watson	44	76	65	76	21
72	F	2011-2012	Watson	100	76	100	76	0
73	M	2011-2012	Watson	49	76	58	76	9
74	F	2011-2012	Watson	100	76	100	76	0
75	M	2011-2012	Watson	100	76	86	76	-14
76	M	2011-2012	Watson	62	76	73	76	11
77	F	2011-2012	Watson	71	76	73	76	2
78	M	2010-2011	Byers	56	76	62	76	6
79	F	2010-2011	Byers	52	76	93	76	41
80	M	2010-2011	Byers	71	76	78	76	7
81	F	2010-2011	Byers	52	76	100	76	48
82	F	2010-2011	Byers	100	76	100	76	0
83	M	2010-2011	Byers	100	76	100	76	0
84	M	2010-2011	Byers	86	76	100	76	14
85	F	2010-2011	Byers	78	76	100	76	22
86	F	2010-2011	Byers	100	76	100	76	0
87	M	2010-2011	Byers	48	76	58	76	10
88	F	2010-2011	Byers	48	76	86	76	38
89	F	2010-2011	Byers	67	76	100	76	33
90	M	2010-2011	Byers	61	76	100	76	39
91	F	2010-2011	Byers	76	76	71	76	-5
92	M	2010-2011	Byers	56	76	100	76	44
93	M	2010-2011	Watson	100	76	67	76	-33
94	M	2010-2011	Watson	78	76	61	76	-17
95	M	2010-2011	Watson	56	76	58	76	2
96	F	2010-2011	Watson	58	76	67	76	9
97	M	2010-2011	Watson	55	76	55	76	0
98	F	2010-2011	Watson	100	76	93	76	-7
99	F	2010-2011	Watson	100	76	100	76	0
100	F	2010-2011	Watson	100	76	100	76	0
101	F	2010-2011	Watson	100	76	100	76	0
102	F	2010-2011	Watson	61	76	54	76	-7
103	M	2010-2011	Watson	100	76	100	76	0
104	M	2010-2011	Watson	58	76	58	76	0

SFA Safety Awareness: Not a Pre-Selected Category								
ID Number	Gender	School Year	Class	Pre-Test Criterion	Pre-Test Cut-Off	Post-Test Criterion	Post-Test Cut-Off	Score Difference
1	F	2013-2014	Byers	100	91	100	91	0
2	F	2013-2014	Byers	100	91	100	91	0
3	F	2013-2014	Byers	91	91	91	91	0
4	F	2013-2014	Byers	100	91	100	91	0
5	M	2013-2014	Byers	100	91	100	91	0
6	F	2013-2014	Byers	100	91	100	91	0
7	M	2013-2014	Byers	91	91	100	91	9
8	F	2013-2014	Byers	100	91	100	91	0
9	F	2013-2014	Byers	100	91	100	91	0
10	F	2013-2014	Byers	100	91	100	91	0
11	M	2013-2014	Byers	60	91	91	91	31
12	F	2013-2014	Byers	100	91	100	91	0
13	M	2013-2014	Byers	100	91	100	91	0
14	M	2013-2014	Byers	100	91	100	91	0
15	M	2013-2014	Byers	100	91	100	91	0
16	M	2013-2014	Byers	100	91	100	91	0
17	M	2013-2014	Byers	100	91	100	91	0
18	F	2013-2014	Strickland	100	91	100	91	0
19	F	2013-2014	Strickland	100	91	100	91	0
20	M	2013-2014	Strickland	100	91	100	91	0
21	M	2013-2014	Strickland	100	91	100	91	0
22	F	2013-2014	Strickland	100	91	100	91	0
23	M	2013-2014	Strickland	100	91	100	91	0
24	M	2013-2014	Strickland	63	91	100	91	37
25	M	2013-2014	Strickland	100	91	100	91	0
26	M	2013-2014	Strickland	100	91	100	91	0
27	F	2013-2014	Strickland	100	91	100	91	0
28	M	2013-2014	Strickland	100	91	81	91	-19
29	F	2013-2014	Strickland	100	91	100	91	0
30	M	2013-2014	Strickland	100	91	100	91	0
31	M	2013-2014	Strickland	74	91	100	91	26
32	M	2013-2014	Strickland	100	91	100	91	0
33	F	2013-2014	Strickland	100	91	100	91	0
34	F	2012-2013	Byers	100	91	91	91	-9
35	F	2012-2013	Byers	100	91	100	91	0
36	M	2012-2013	Byers	51	91	69	91	18
37	M	2012-2013	Byers	100	91	100	91	0
38	F	2012-2013	Byers	100	91	100	91	0
39	M	2012-2013	Byers	66	91	67	91	1
40	F	2012-2013	Byers	100	91	100	91	0
41	F	2012-2013	Byers	100	91	100	91	0
42	F	2012-2013	Byers	100	91	100	91	0
43	M	2012-2013	Byers	91	91	91	91	0
44	F	2012-2013	Byers	100	91	100	91	0
45	F	2012-2013	Watson	91	91	100	91	9
46	F	2012-2013	Watson	100	91	100	91	0
47	M	2012-2013	Watson	100	91	100	91	0
48	M	2012-2013	Watson	100	91	100	91	0
49	F	2012-2013	Watson	100	91	100	91	0
50	F	2012-2013	Watson	100	91	100	91	0
51	M	2012-2013	Watson	100	91	100	91	0
52	F	2012-2013	Watson	100	91	100	91	0
53	M	2012-2013	Watson	100	91	100	91	0

SFA Safety Awareness: Not a Pre-Selected Category								
ID Number	Gender	School Year	Class	Pre-Test Criterion	Pre-Test Cut-Off	Post-Test Criterion	Post-Test Cut-Off	Score Difference
54	F	2011-2012	Byers	100	91	100	91	0
55	M	2011-2012	Byers	100	91	100	91	0
56	F	2011-2012	Byers	100	91	100	91	0
57	M	2011-2012	Byers	100	91	100	91	0
58	F	2011-2012	Byers	100	91	100	91	0
59	F	2011-2012	Byers	100	91	100	91	0
60	F	2011-2012	Byers	100	91	100	91	0
61	M	2011-2012	Byers	100	91	100	91	0
62	M	2011-2012	Byers	91	91	100	91	9
63	M	2011-2012	Byers	66	91	91	91	25
64	F	2011-2012	Byers	100	91	100	91	0
65	M	2011-2012	Byers	57	91	63	91	6
66	F	2011-2012	Watson	100	91	100	91	0
67	M	2011-2012	Watson	63	91	100	91	37
68	F	2011-2012	Watson	100	91	74	91	-26
69	F	2011-2012	Watson	100	91	100	91	0
70	M	2011-2012	Watson	100	91	100	91	0
71	M	2011-2012	Watson	63	91	91	91	28
72	F	2011-2012	Watson	100	91	100	91	0
73	M	2011-2012	Watson	66	91	91	91	25
74	F	2011-2012	Watson	100	91	100	91	0
75	M	2011-2012	Watson	91	91	100	91	9
76	M	2011-2012	Watson	69	91	81	91	12
77	F	2011-2012	Watson	100	91	100	91	0
78	M	2010-2011	Byers	60	91	69	91	9
79	F	2010-2011	Byers	100	91	100	91	0
80	M	2010-2011	Byers	100	91	100	91	0
81	F	2010-2011	Byers	100	91	100	91	0
82	F	2010-2011	Byers	100	91	100	91	0
83	M	2010-2011	Byers	100	91	100	91	0
84	M	2010-2011	Byers	69	91	100	91	31
85	F	2010-2011	Byers	100	91	100	91	0
86	F	2010-2011	Byers	100	91	100	91	0
87	M	2010-2011	Byers	53	91	74	91	21
88	F	2010-2011	Byers	91	91	100	91	9
89	F	2010-2011	Byers	81	91	100	91	19
90	M	2010-2011	Byers	63	91	100	91	37
91	F	2010-2011	Byers	100	91	100	91	0
92	M	2010-2011	Byers	81	91	100	91	19
93	M	2010-2011	Watson	100	91	91	91	-9
94	M	2010-2011	Watson	81	91	91	91	10
95	M	2010-2011	Watson	60	91	60	91	0
96	F	2010-2011	Watson	50	91	100	91	50
97	M	2010-2011	Watson	74	91	100	91	26
98	F	2010-2011	Watson	100	91	100	91	0
99	F	2010-2011	Watson	100	91	91	91	-9
100	F	2010-2011	Watson	100	91	100	91	0
101	F	2010-2011	Watson	100	91	100	91	0
102	F	2010-2011	Watson	69	91	100	91	31
103	M	2010-2011	Watson	100	91	100	91	0
104	M	2010-2011	Watson	91	91	100	91	9

APPENDIX E: SPM COMPLETE DATA SPREADSHEET

SPM Vision: A Pre-Selected Category								
ID Number	Gender	School Year	Class	Pre-Test Raw Score	Pre-Test Functional Classification	Post-Test Raw	Post-Test Functional Classification	Score Difference
1	F	2013-2014	Byers	7	Typical	7	Typical	0
2	F	2013-2014	Byers	7	Typical	7	Typical	0
3	F	2013-2014	Byers	9	Typical	7	Typical	-2
4	F	2013-2014	Byers	7	Typical	7	Typical	0
5	M	2013-2014	Byers	7	Typical	7	Typical	0
6	F	2013-2014	Byers	7	Typical	7	Typical	0
7	M	2013-2014	Byers	7	Typical	7	Typical	0
8	F	2013-2014	Byers	7	Typical	7	Typical	0
9	F	2013-2014	Byers	7	Typical	7	Typical	0
10	F	2013-2014	Byers	7	Typical	7	Typical	0
11	M	2013-2014	Byers	11	Typical	7	Typical	-4
12	F	2013-2014	Byers	7	Typical	7	Typical	0
13	M	2013-2014	Byers	7	Typical	7	Typical	0
14	M	2013-2014	Byers	7	Typical	7	Typical	0
15	M	2013-2014	Byers	7	Typical	7	Typical	0
16	M	2013-2014	Byers	11	Typical	7	Typical	-4
17	M	2013-2014	Byers	7	Typical	7	Typical	0
18	F	2013-2014	Strickland	13	Probable Difference	14	Probable Difference	1
19	F	2013-2014	Strickland	13	Probable Difference	11	Typical	-2
20	M	2013-2014	Strickland	10	Typical	15	Probable Difference	5
21	M	2013-2014	Strickland	13	Probable Difference	15	Probable Difference	2
22	F	2013-2014	Strickland	13	Probable Difference	13	Probable Difference	0
23	M	2013-2014	Strickland	10	Typical	9	Typical	-1
24	M	2013-2014	Strickland	12	Probable Difference	12	Probable Difference	0
25	M	2013-2014	Strickland	10	Typical	13	Probable Difference	3
26	M	2013-2014	Strickland	10	Typical	10	Typical	0
27	F	2013-2014	Strickland	16	Definite Difference	15	Probable Difference	-1
28	M	2013-2014	Strickland	13	Probable Difference	15	Probable Difference	2
29	F	2013-2014	Strickland	10	Typical	10	Typical	0
30	M	2013-2014	Strickland	14	Probable Difference	17	Definite Difference	3
31	M	2013-2014	Strickland	12	Probable Difference	12	Probable Difference	0
32	M	2013-2014	Strickland	11	Typical	12	Probable Difference	1
33	F	2013-2014	Strickland	13	Probable Difference	13	Probable Difference	0
34	F	2012-2013	Byers	8	Typical	8	Typical	0
35	F	2012-2013	Byers	7	Typical	7	Typical	0
36	M	2012-2013	Byers	7	Typical	11	Typical	4
37	M	2012-2013	Byers	7	Typical	7	Typical	0
38	F	2012-2013	Byers	7	Typical	10	Typical	3
39	M	2012-2013	Byers	7	Typical	10	Typical	3
40	F	2012-2013	Byers	7	Typical	7	Typical	0
41	F	2012-2013	Byers	7	Typical	7	Typical	0
42	F	2012-2013	Byers	7	Typical	7	Typical	0
43	M	2012-2013	Byers	9	Typical	11	Typical	2
44	F	2012-2013	Byers	7	Typical	8	Typical	1
45	F	2012-2013	Watson	7	Typical	10	Typical	3
46	F	2012-2013	Watson	14	Probable Difference	7	Typical	-7
47	M	2012-2013	Watson	7	Typical	7	Typical	0
48	M	2012-2013	Watson	7	Typical	7	Typical	0
49	F	2012-2013	Watson	7	Typical	7	Typical	0
50	F	2012-2013	Watson	8	Typical	7	Typical	-1
51	M	2012-2013	Watson	7	Typical	7	Typical	0
52	F	2012-2013	Watson	11	Typical	7	Typical	-4
53	M	2012-2013	Watson	9	Typical	7	Typical	-2

SPM Vision: A Pre-Selected Category								
ID Number	Gender	School Year	Class	Pre-Test Raw Score	Pre-Test Functional Classification	Post-Test Raw	Post-Test Functional Classification	Score Difference
54	F	2011-2012	Byers	7	Typical	7	Typical	0
55	M	2011-2012	Byers	7	Typical	7	Typical	0
56	F	2011-2012	Byers	7	Typical	7	Typical	0
57	M	2011-2012	Byers	7	Typical	7	Typical	0
58	F	2011-2012	Byers	7	Typical	7	Typical	0
59	F	2011-2012	Byers	7	Typical	7	Typical	0
60	F	2011-2012	Byers	7	Typical	7	Typical	0
61	M	2011-2012	Byers	7	Typical	7	Typical	0
62	M	2011-2012	Byers	28	Definite Difference	7	Typical	-21
63	M	2011-2012	Byers	11	Typical	9	Typical	-2
64	F	2011-2012	Byers	7	Typical	7	Typical	0
65	M	2011-2012	Byers	13	Probable Difference	11	Typical	-2
66	F	2011-2012	Watson	8	Typical	8	Typical	0
67	M	2011-2012	Watson	12	Probable Difference	7	Typical	-5
68	F	2011-2012	Watson	9	Typical	10	Typical	1
69	F	2011-2012	Watson	7	Typical	7	Typical	0
70	M	2011-2012	Watson	9	Typical	7	Typical	-2
71	M	2011-2012	Watson	15	Probable Difference	9	Typical	-6
72	F	2011-2012	Watson	7	Typical	7	Typical	0
73	M	2011-2012	Watson	18	Definite Difference	19	Definite Difference	1
74	F	2011-2012	Watson	7	Typical	7	Typical	0
75	M	2011-2012	Watson	7	Typical	7	Typical	0
76	M	2011-2012	Watson	11	Typical	17	Definite Difference	6
77	F	2011-2012	Watson	7	Typical	8	Typical	1
78	M	2010-2011	Byers	10	Typical	7	Typical	-3
79	F	2010-2011	Byers	11	Typical	7	Typical	-4
80	M	2010-2011	Byers	7	Typical	7	Typical	0
81	F	2010-2011	Byers	8	Typical	7	Typical	-1
82	F	2010-2011	Byers	7	Typical	7	Typical	0
83	M	2010-2011	Byers	7	Typical	7	Typical	0
84	M	2010-2011	Byers	11	Typical	7	Typical	-4
85	F	2010-2011	Byers	9	Typical	7	Typical	-2
86	F	2010-2011	Byers	7	Typical	7	Typical	0
87	M	2010-2011	Byers	13	Probable Difference	7	Typical	-6
88	F	2010-2011	Byers	12	Probable Difference	7	Typical	-5
89	F	2010-2011	Byers	11	Typical	7	Typical	-4
90	M	2010-2011	Byers	7	Typical	7	Typical	0
91	F	2010-2011	Byers	7	Typical	7	Typical	0
92	M	2010-2011	Byers	9	Typical	7	Typical	-2
93	M	2010-2011	Watson	7	Typical	8	Typical	1
94	M	2010-2011	Watson	7	Typical	8	Typical	1
95	M	2010-2011	Watson	9	Typical	9	Typical	0
96	F	2010-2011	Watson	19	Definite Difference	15	Probable Difference	-4
97	M	2010-2011	Watson	9	Typical	9	Typical	0
98	F	2010-2011	Watson	9	Typical	7	Typical	-2
99	F	2010-2011	Watson	9	Typical	8	Typical	-1
100	F	2010-2011	Watson	7	Typical	7	Typical	0
101	F	2010-2011	Watson	7	Typical	7	Typical	0
102	F	2010-2011	Watson	13	Probable Difference	15	Probable Difference	2
103	M	2010-2011	Watson	9	Typical	7	Typical	-2
104	M	2010-2011	Watson	19	Definite Difference	17	Definite Difference	-2

SPM Hearing: A Pre-Selected Category								
ID Number	Gender	School Year	Class	Pre-Test Raw Score	Pre-Test Functional Classification	Post-Test Raw Score	Post-Test Functional Classification	Score Difference
1	F	2013-2014	Byers	7	Typical	7	Typical	0
2	F	2013-2014	Byers	7	Typical	7	Typical	0
3	F	2013-2014	Byers	14	Probable Difference	16	Definite Difference	2
4	F	2013-2014	Byers	7	Typical	7	Typical	0
5	M	2013-2014	Byers	9	Typical	8	Typical	-1
6	F	2013-2014	Byers	10	Typical	7	Typical	-3
7	M	2013-2014	Byers	14	Probable Difference	15	Probable Difference	1
8	F	2013-2014	Byers	10	Typical	7	Typical	-3
9	F	2013-2014	Byers	8	Typical	9	Typical	1
10	F	2013-2014	Byers	8	Typical	7	Typical	-1
11	M	2013-2014	Byers	18	Definite Difference	10	Typical	-8
12	F	2013-2014	Byers	7	Typical	10	Typical	3
13	M	2013-2014	Byers	11	Probable Difference	8	Typical	-3
14	M	2013-2014	Byers	13	Probable Difference	7	Typical	-6
15	M	2013-2014	Byers	13	Probable Difference	7	Typical	-6
16	M	2013-2014	Byers	13	Probable Difference	7	Typical	-6
17	M	2013-2014	Byers	9	Typical	10	Typical	1
18	F	2013-2014	Strickland	13	Probable Difference	12	Probable Difference	-1
19	F	2013-2014	Strickland	15	Probable Difference	15	Probable Difference	0
20	M	2013-2014	Strickland	11	Probable Difference	10	Typical	-1
21	M	2013-2014	Strickland	18	Definite Difference	16	Definite Difference	-2
22	F	2013-2014	Strickland	12	Probable Difference	11	Probable Difference	-1
23	M	2013-2014	Strickland	12	Probable Difference	15	Probable Difference	3
24	M	2013-2014	Strickland	12	Probable Difference	10	Typical	-2
25	M	2013-2014	Strickland	12	Probable Difference	10	Typical	-2
26	M	2013-2014	Strickland	10	Typical	10	Typical	0
27	F	2013-2014	Strickland	16	Definite Difference	13	Probable Difference	-3
28	M	2013-2014	Strickland	15	Probable Difference	15	Probable Difference	0
29	F	2013-2014	Strickland	12	Probable Difference	11	Probable Difference	-1
30	M	2013-2014	Strickland	16	Definite Difference	16	Definite Difference	0
31	M	2013-2014	Strickland	11	Probable Difference	10	Typical	-1
32	M	2013-2014	Strickland	13	Probable Difference	13	Probable Difference	0
33	F	2013-2014	Strickland	13	Probable Difference	11	Probable Difference	-2
34	F	2012-2013	Byers	12	Probable Difference	8	Typical	-4
35	F	2012-2013	Byers	8	Typical	8	Typical	0
36	M	2012-2013	Byers	15	Probable Difference	14	Probable Difference	-1
37	M	2012-2013	Byers	7	Typical	7	Typical	0
38	F	2012-2013	Byers	11	Probable Difference	11	Probable Difference	0
39	M	2012-2013	Byers	13	Probable Difference	11	Probable Difference	-2
40	F	2012-2013	Byers	7	Typical	7	Typical	0
41	F	2012-2013	Byers	7	Typical	7	Typical	0
42	F	2012-2013	Byers	8	Typical	9	Typical	1
43	M	2012-2013	Byers	7	Typical	7	Typical	0
44	F	2012-2013	Byers	9	Typical	7	Typical	-2
45	F	2012-2013	Watson	7	Typical	10	Typical	3
46	F	2012-2013	Watson	7	Typical	8	Typical	1
47	M	2012-2013	Watson	7	Typical	7	Typical	0
48	M	2012-2013	Watson	7	Typical	8	Typical	1
49	F	2012-2013	Watson	7	Typical	7	Typical	0
50	F	2012-2013	Watson	9	Typical	7	Typical	-2
51	M	2012-2013	Watson	7	Typical	7	Typical	0
52	F	2012-2013	Watson	12	Probable Difference	8	Typical	-4
53	M	2012-2013	Watson	9	Typical	9	Typical	0

SPM Hearing: A Pre-Selected Category								
ID Number	Gender	School Year	Class	Pre-Test Raw Score	Pre-Test Functional Classification	Post-Test Raw Score	Post-Test Functional Classification	Score Difference
54	F	2011-2012	Byers	7	Typical	7	Typical	0
55	M	2011-2012	Byers	7	Typical	7	Typical	0
56	F	2011-2012	Byers	7	Typical	7	Typical	0
57	M	2011-2012	Byers	7	Typical	7	Typical	0
58	F	2011-2012	Byers	7	Typical	7	Typical	0
59	F	2011-2012	Byers	7	Typical	7	Typical	0
60	F	2011-2012	Byers	10	Typical	7	Typical	-3
61	M	2011-2012	Byers	13	Probable Difference	7	Typical	-6
62	M	2011-2012	Byers	28	Definite Difference	7	Typical	-21
63	M	2011-2012	Byers	19	Definite Difference	8	Typical	-11
64	F	2011-2012	Byers	9	Typical	7	Typical	-2
65	M	2011-2012	Byers	20	Definite Difference	13	Probable Difference	-7
66	F	2011-2012	Watson	8	Typical	7	Typical	-1
67	M	2011-2012	Watson	10	Typical	7	Typical	-3
68	F	2011-2012	Watson	8	Typical	13	Probable Difference	5
69	F	2011-2012	Watson	7	Typical	7	Typical	0
70	M	2011-2012	Watson	10	Typical	10	Typical	0
71	M	2011-2012	Watson	17	Definite Difference	12	Probable Difference	-5
72	F	2011-2012	Watson	7	Typical	7	Typical	0
73	M	2011-2012	Watson	16	Definite Difference	19	Definite Difference	3
74	F	2011-2012	Watson	7	Typical	7	Typical	0
75	M	2011-2012	Watson	7	Typical	8	Typical	1
76	M	2011-2012	Watson	14	Probable Difference	15	Probable Difference	1
77	F	2011-2012	Watson	7	Typical	7	Typical	0
78	M	2010-2011	Byers	12	Probable Difference	11	Probable Difference	-1
79	F	2010-2011	Byers	8	Typical	7	Typical	-1
80	M	2010-2011	Byers	8	Typical	7	Typical	-1
81	F	2010-2011	Byers	8	Typical	7	Typical	-1
82	F	2010-2011	Byers	7	Typical	7	Typical	0
83	M	2010-2011	Byers	7	Typical	7	Typical	0
84	M	2010-2011	Byers	11	Probable Difference	15	Probable Difference	4
85	F	2010-2011	Byers	8	Typical	11	Probable Difference	3
86	F	2010-2011	Byers	7	Typical	7	Typical	0
87	M	2010-2011	Byers	12	Probable Difference	14	Probable Difference	2
88	F	2010-2011	Byers	19	Definite Difference	13	Probable Difference	-6
89	F	2010-2011	Byers	9	Typical	7	Typical	-2
90	M	2010-2011	Byers	8	Typical	13	Probable Difference	5
91	F	2010-2011	Byers	9	Typical	7	Typical	-2
92	M	2010-2011	Byers	10	Typical	9	Typical	-1
93	M	2010-2011	Watson	7	Typical	11	Probable Difference	4
94	M	2010-2011	Watson	16	Definite Difference	16	Definite Difference	0
95	M	2010-2011	Watson	20	Definite Difference	18	Definite Difference	-2
96	F	2010-2011	Watson	19	Definite Difference	13	Probable Difference	-6
97	M	2010-2011	Watson	13	Probable Difference	12	Probable Difference	-1
98	F	2010-2011	Watson	7	Typical	9	Typical	2
99	F	2010-2011	Watson	7	Typical	9	Typical	2
100	F	2010-2011	Watson	9	Typical	9	Typical	0
101	F	2010-2011	Watson	13	Probable Difference	11	Probable Difference	-2
102	F	2010-2011	Watson	18	Definite Difference	18	Definite Difference	0
103	M	2010-2011	Watson	7	Typical	9	Typical	2
104	M	2010-2011	Watson	12	Probable Difference	9	Typical	-3

SPM Touch: A Pre-Selected Category								
ID Number	Gender	School Year	Class	Pre-Test Raw Score	Pre-Test Functional Classification	Post-Test Raw Score	Post-Test Functional Classification	Score Difference
1	F	2013-2014	Byers	8	Typical	8	Typical	0
2	F	2013-2014	Byers	8	Typical	8	Typical	0
3	F	2013-2014	Byers	8	Typical	10	Typical	2
4	F	2013-2014	Byers	8	Typical	8	Typical	0
5	M	2013-2014	Byers	8	Typical	8	Typical	0
6	F	2013-2014	Byers	8	Typical	8	Typical	0
7	M	2013-2014	Byers	8	Typical	10	Typical	2
8	F	2013-2014	Byers	8	Typical	8	Typical	0
9	F	2013-2014	Byers	8	Typical	9	Typical	1
10	F	2013-2014	Byers	9	Typical	8	Typical	-1
11	M	2013-2014	Byers	17	Definite Difference	11	Probable Difference	-6
12	F	2013-2014	Byers	8	Typical	8	Typical	0
13	M	2013-2014	Byers	10	Typical	9	Typical	-1
14	M	2013-2014	Byers	8	Typical	8	Typical	0
15	M	2013-2014	Byers	8	Typical	8	Typical	0
16	M	2013-2014	Byers	9	Typical	8	Typical	-1
17	M	2013-2014	Byers	8	Typical	8	Typical	0
18	F	2013-2014	Strickland	17	Definite Difference	14	Probable Difference	-3
19	F	2013-2014	Strickland	20	Definite Difference	17	Definite Difference	-3
20	M	2013-2014	Strickland	12	Probable Difference	12	Probable Difference	0
21	M	2013-2014	Strickland	14	Probable Difference	14	Probable Difference	0
22	F	2013-2014	Strickland	15	Probable Difference	16	Definite Difference	1
23	M	2013-2014	Strickland	12	Probable Difference	12	Probable Difference	0
24	M	2013-2014	Strickland	22	Definite Difference	17	Definite Difference	-5
25	M	2013-2014	Strickland	12	Probable Difference	13	Probable Difference	1
26	M	2013-2014	Strickland	13	Probable Difference	13	Probable Difference	0
27	F	2013-2014	Strickland	16	Definite Difference	15	Probable Difference	-1
28	M	2013-2014	Strickland	14	Probable Difference	16	Definite Difference	2
29	F	2013-2014	Strickland	13	Probable Difference	12	Probable Difference	-1
30	M	2013-2014	Strickland	13	Probable Difference	13	Probable Difference	0
31	M	2013-2014	Strickland	13	Probable Difference	12	Probable Difference	-1
32	M	2013-2014	Strickland	12	Probable Difference	13	Probable Difference	1
33	F	2013-2014	Strickland	9	Typical	9	Typical	0
34	F	2012-2013	Byers	9	Typical	9	Typical	0
35	F	2012-2013	Byers	8	Typical	8	Typical	0
36	M	2012-2013	Byers	12	Probable Difference	17	Definite Difference	5
37	M	2012-2013	Byers	9	Typical	9	Typical	0
38	F	2012-2013	Byers	9	Typical	9	Typical	0
39	M	2012-2013	Byers	9	Typical	10	Typical	1
40	F	2012-2013	Byers	8	Typical	9	Typical	1
41	F	2012-2013	Byers	9	Typical	8	Typical	-1
42	F	2012-2013	Byers	8	Typical	9	Typical	1
43	M	2012-2013	Byers	9	Typical	10	Typical	1
44	F	2012-2013	Byers	8	Typical	9	Typical	1
45	F	2012-2013	Watson	8	Typical	9	Typical	1
46	F	2012-2013	Watson	8	Typical	9	Typical	1
47	M	2012-2013	Watson	8	Typical	9	Typical	1
48	M	2012-2013	Watson	9	Typical	8	Typical	-1
49	F	2012-2013	Watson	8	Typical	11	Probable Difference	3
50	F	2012-2013	Watson	8	Typical	8	Typical	0
51	M	2012-2013	Watson	8	Typical	8	Typical	0
52	F	2012-2013	Watson	12	Probable Difference	9	Typical	-3
53	M	2012-2013	Watson	9	Typical	8	Typical	-1

SPM Touch: A Pre-Selected Category								
ID Number	Gender	School Year	Class	Pre-Test Raw Score	Pre-Test Functional Classification	Post-Test Raw Score	Post-Test Functional Classification	Score Difference
54	F	2011-2012	Byers	9	Typical	10	Typical	1
55	M	2011-2012	Byers	9	Typical	8	Typical	-1
56	F	2011-2012	Byers	8	Typical	10	Typical	2
57	M	2011-2012	Byers	8	Typical	8	Typical	0
58	F	2011-2012	Byers	8	Typical	8	Typical	0
59	F	2011-2012	Byers	8	Typical	8	Typical	0
60	F	2011-2012	Byers	8	Typical	9	Typical	1
61	M	2011-2012	Byers	9	Typical	8	Typical	-1
62	M	2011-2012	Byers	8	Typical	8	Typical	0
63	M	2011-2012	Byers	11	Probable Difference	9	Typical	-2
64	F	2011-2012	Byers	9	Typical	8	Typical	-1
65	M	2011-2012	Byers	16	Definite Difference	12	Probable Difference	-4
66	F	2011-2012	Watson	10	Typical	10	Typical	0
67	M	2011-2012	Watson	10	Typical	8	Typical	-2
68	F	2011-2012	Watson	10	Typical	12	Probable Difference	2
69	F	2011-2012	Watson	8	Typical	8	Typical	0
70	M	2011-2012	Watson	8	Typical	8	Typical	0
71	M	2011-2012	Watson	18	Definite Difference	10	Typical	-8
72	F	2011-2012	Watson	8	Typical	8	Typical	0
73	M	2011-2012	Watson	16	Definite Difference	12	Probable Difference	-4
74	F	2011-2012	Watson	8	Typical	8	Typical	0
75	M	2011-2012	Watson	8	Typical	9	Typical	1
76	M	2011-2012	Watson	15	Probable Difference	15	Probable Difference	0
77	F	2011-2012	Watson	8	Typical	8	Typical	0
78	M	2010-2011	Byers	9	Typical	9	Typical	0
79	F	2010-2011	Byers	9	Typical	8	Typical	-1
80	M	2010-2011	Byers	9	Typical	9	Typical	0
81	F	2010-2011	Byers	9	Typical	8	Typical	-1
82	F	2010-2011	Byers	8	Typical	8	Typical	0
83	M	2010-2011	Byers	9	Typical	9	Typical	0
84	M	2010-2011	Byers	9	Typical	10	Typical	1
85	F	2010-2011	Byers	8	Typical	9	Typical	1
86	F	2010-2011	Byers	8	Typical	8	Typical	0
87	M	2010-2011	Byers	10	Typical	10	Typical	0
88	F	2010-2011	Byers	19	Definite Difference	12	Probable Difference	-7
89	F	2010-2011	Byers	9	Typical	9	Typical	0
90	M	2010-2011	Byers	8	Typical	9	Typical	1
91	F	2010-2011	Byers	11	Probable Difference	8	Typical	-3
92	M	2010-2011	Byers	8	Typical	8	Typical	0
93	M	2010-2011	Watson	8	Typical	13	Probable Difference	5
94	M	2010-2011	Watson	13	Probable Difference	13	Probable Difference	0
95	M	2010-2011	Watson	11	Probable Difference	14	Probable Difference	3
96	F	2010-2011	Watson	15	Probable Difference	13	Probable Difference	-2
97	M	2010-2011	Watson	11	Probable Difference	12	Probable Difference	1
98	F	2010-2011	Watson	8	Typical	11	Probable Difference	3
99	F	2010-2011	Watson	8	Typical	11	Probable Difference	3
100	F	2010-2011	Watson	8	Typical	11	Probable Difference	3
101	F	2010-2011	Watson	11	Probable Difference	11	Probable Difference	0
102	F	2010-2011	Watson	17	Definite Difference	16	Definite Difference	-1
103	M	2010-2011	Watson	12	Probable Difference	10	Typical	-2
104	M	2010-2011	Watson	11	Probable Difference	13	Probable Difference	2

SPM Balance & Motion: A Pre-Selected Category								
ID Number	Gender	School Year	Class	Pre-Test Raw Score	Pre-Test Functional Classification	Post-Test Raw Score	Post-Test Functional Classification	Score Difference
1	F	2013-2014	Byers	10	Typical	9	Typical	-1
2	F	2013-2014	Byers	14	Typical	10	Typical	-4
3	F	2013-2014	Byers	15	Probable Difference	15	Probable Difference	0
4	F	2013-2014	Byers	11	Typical	9	Typical	-2
5	M	2013-2014	Byers	10	Typical	9	Typical	-1
6	F	2013-2014	Byers	10	Typical	9	Typical	-1
7	M	2013-2014	Byers	12	Typical	14	Typical	2
8	F	2013-2014	Byers	13	Typical	9	Typical	-4
9	F	2013-2014	Byers	20	Probable Difference	12	Typical	-8
10	F	2013-2014	Byers	9	Typical	9	Typical	0
11	M	2013-2014	Byers	34	Definite Difference	24	Definite Difference	-10
12	F	2013-2014	Byers	12	Typical	12	Typical	0
13	M	2013-2014	Byers	11	Typical	15	Probable Difference	4
14	M	2013-2014	Byers	14	Typical	12	Typical	-2
15	M	2013-2014	Byers	15	Probable Difference	9	Typical	-6
16	M	2013-2014	Byers	26	Definite Difference	19	Probable Difference	-7
17	M	2013-2014	Byers	9	Typical	9	Typical	0
18	F	2013-2014	Strickland	16	Probable Difference	16	Probable Difference	0
19	F	2013-2014	Strickland	16	Probable Difference	18	Probable Difference	2
20	M	2013-2014	Strickland	15	Probable Difference	18	Probable Difference	3
21	M	2013-2014	Strickland	23	Definite Difference	30	Definite Difference	7
22	F	2013-2014	Strickland	17	Probable Difference	18	Probable Difference	1
23	M	2013-2014	Strickland	13	Typical	17	Probable Difference	4
24	M	2013-2014	Strickland	22	Definite Difference	23	Definite Difference	1
25	M	2013-2014	Strickland	18	Probable Difference	19	Probable Difference	1
26	M	2013-2014	Strickland	17	Probable Difference	19	Probable Difference	2
27	F	2013-2014	Strickland	19	Probable Difference	20	Probable Difference	1
28	M	2013-2014	Strickland	30	Definite Difference	28	Definite Difference	-2
29	F	2013-2014	Strickland	19	Probable Difference	19	Probable Difference	0
30	M	2013-2014	Strickland	21	Probable Difference	22	Definite Difference	1
31	M	2013-2014	Strickland	22	Definite Difference	27	Definite Difference	5
32	M	2013-2014	Strickland	22	Definite Difference	23	Definite Difference	1
33	F	2013-2014	Strickland	22	Definite Difference	21	Probable Difference	-1
34	F	2012-2013	Byers	9	Typical	9	Typical	0
35	F	2012-2013	Byers	12	Typical	11	Typical	-1
36	M	2012-2013	Byers	21	Probable Difference	15	Probable Difference	-6
37	M	2012-2013	Byers	9	Typical	9	Typical	0
38	F	2012-2013	Byers	21	Probable Difference	14	Typical	-7
39	M	2012-2013	Byers	20	Probable Difference	17	Probable Difference	-3
40	F	2012-2013	Byers	9	Typical	9	Typical	0
41	F	2012-2013	Byers	9	Typical	9	Typical	0
42	F	2012-2013	Byers	9	Typical	9	Typical	0
43	M	2012-2013	Byers	18	Probable Difference	14	Typical	-4
44	F	2012-2013	Byers	9	Typical	9	Typical	0
45	F	2012-2013	Watson	12	Typical	9	Typical	-3
46	F	2012-2013	Watson	9	Typical	9	Typical	0
47	M	2012-2013	Watson	9	Typical	9	Typical	0
48	M	2012-2013	Watson	9	Typical	9	Typical	0
49	F	2012-2013	Watson	9	Typical	9	Typical	0
50	F	2012-2013	Watson	12	Typical	9	Typical	-3
51	M	2012-2013	Watson	9	Typical	9	Typical	0
52	F	2012-2013	Watson	14	Typical	9	Typical	-5
53	M	2012-2013	Watson	9	Typical	9	Typical	0

SPM Balance & Motion: A Pre-Selected Category								
ID Number	Gender	School Year	Class	Pre-Test Raw Score	Pre-Test Functional Classification	Post-Test Raw Score	Post-Test Functional Classification	Score Difference
54	F	2011-2012	Byers	9	Typical	9	Typical	0
55	M	2011-2012	Byers	10	Typical	14	Typical	4
56	F	2011-2012	Byers	10	Typical	9	Typical	-1
57	M	2011-2012	Byers	12	Typical	10	Typical	-2
58	F	2011-2012	Byers	9	Typical	9	Typical	0
59	F	2011-2012	Byers	9	Typical	9	Typical	0
60	F	2011-2012	Byers	12	Typical	12	Typical	0
61	M	2011-2012	Byers	14	Typical	9	Typical	-5
62	M	2011-2012	Byers	16	Probable Difference	9	Typical	-7
63	M	2011-2012	Byers	26	Definite Difference	9	Typical	-17
64	F	2011-2012	Byers	9	Typical	10	Typical	1
65	M	2011-2012	Byers	32	Definite Difference	16	Probable Difference	-16
66	F	2011-2012	Watson	9	Typical	9	Typical	0
67	M	2011-2012	Watson	9	Typical	9	Typical	0
68	F	2011-2012	Watson	11	Typical	12	Typical	1
69	F	2011-2012	Watson	9	Typical	9	Typical	0
70	M	2011-2012	Watson	13	Typical	10	Typical	-3
71	M	2011-2012	Watson	28	Definite Difference	23	Definite Difference	-5
72	F	2011-2012	Watson	9	Typical	9	Typical	0
73	M	2011-2012	Watson	18	Probable Difference	14	Typical	-4
74	F	2011-2012	Watson	9	Typical	9	Typical	0
75	M	2011-2012	Watson	9	Typical	13	Typical	4
76	M	2011-2012	Watson	12	Typical	13	Typical	1
77	F	2011-2012	Watson	9	Typical	9	Typical	0
78	M	2010-2011	Byers	24	Definite Difference	17	Probable Difference	-7
79	F	2010-2011	Byers	11	Typical	9	Typical	-2
80	M	2010-2011	Byers	13	Typical	9	Typical	-4
81	F	2010-2011	Byers	11	Typical	9	Typical	-2
82	F	2010-2011	Byers	9	Typical	9	Typical	0
83	M	2010-2011	Byers	10	Typical	9	Typical	-1
84	M	2010-2011	Byers	11	Typical	9	Typical	-2
85	F	2010-2011	Byers	12	Typical	16	Probable Difference	4
86	F	2010-2011	Byers	10	Typical	12	Typical	2
87	M	2010-2011	Byers	22	Definite Difference	21	Probable Difference	-1
88	F	2010-2011	Byers	19	Probable Difference	14	Typical	-5
89	F	2010-2011	Byers	14	Typical	9	Typical	-5
90	M	2010-2011	Byers	13	Typical	11	Typical	-2
91	F	2010-2011	Byers	11	Typical	9	Typical	-2
92	M	2010-2011	Byers	18	Probable Difference	9	Typical	-9
93	M	2010-2011	Watson	10	Typical	11	Typical	1
94	M	2010-2011	Watson	23	Definite Difference	12	Typical	-11
95	M	2010-2011	Watson	18	Probable Difference	16	Probable Difference	-2
96	F	2010-2011	Watson	14	Typical	12	Typical	-2
97	M	2010-2011	Watson	13	Typical	13	Typical	0
98	F	2010-2011	Watson	9	Typical	10	Typical	1
99	F	2010-2011	Watson	9	Typical	9	Typical	0
100	F	2010-2011	Watson	9	Typical	9	Typical	0
101	F	2010-2011	Watson	12	Typical	14	Typical	2
102	F	2010-2011	Watson	21	Probable Difference	22	Definite Difference	1
103	M	2010-2011	Watson	10	Typical	10	Typical	0
104	M	2010-2011	Watson	17	Probable Difference	14	Typical	-3

SPM Total Sensory Systems: A Pre-Selected Category								
ID Number	Gender	School Year	Class	Pre-Test Raw Score	Pre-Test Functional Classification	Post-Test Raw Score	Post-Test Functional Classification	Score Difference
1	F	2013-2014	Byers	43	Typical	42	Typical	-1
2	F	2013-2014	Byers	47	Typical	43	Typical	-4
3	F	2013-2014	Byers	65	Probable Difference	76	Probable Difference	11
4	F	2013-2014	Byers	45	Typical	42	Typical	-3
5	M	2013-2014	Byers	48	Typical	43	Typical	-5
6	F	2013-2014	Byers	47	Typical	43	Typical	-4
7	M	2013-2014	Byers	57	Typical	61	Typical	4
8	F	2013-2014	Byers	51	Typical	42	Typical	-9
9	F	2013-2014	Byers	56	Typical	51	Typical	-5
10	F	2013-2014	Byers	47	Typical	42	Typical	-5
11	M	2013-2014	Byers	106	Definite Difference	78	Probable Difference	-28
12	F	2013-2014	Byers	45	Typical	49	Typical	4
13	M	2013-2014	Byers	53	Typical	51	Typical	-2
14	M	2013-2014	Byers	57	Typical	45	Typical	-12
15	M	2013-2014	Byers	60	Typical	42	Typical	-18
16	M	2013-2014	Byers	82	Probable Difference	61	Typical	-21
17	M	2013-2014	Byers	45	Typical	45	Typical	0
18	F	2013-2014	Strickland	73	Probable Difference	69	Probable Difference	-4
19	F	2013-2014	Strickland	88	Definite Difference	84	Probable Difference	-4
20	M	2013-2014	Strickland	65	Probable Difference	71	Probable Difference	6
21	M	2013-2014	Strickland	87	Definite Difference	97	Definite Difference	10
22	F	2013-2014	Strickland	76	Probable Difference	77	Probable Difference	1
23	M	2013-2014	Strickland	63	Probable Difference	71	Probable Difference	8
24	M	2013-2014	Strickland	104	Definite Difference	87	Definite Difference	-17
25	M	2013-2014	Strickland	68	Probable Difference	71	Probable Difference	3
26	M	2013-2014	Strickland	66	Probable Difference	68	Probable Difference	2
27	F	2013-2014	Strickland	87	Definite Difference	82	Probable Difference	-5
28	M	2013-2014	Strickland	102	Definite Difference	100	Definite Difference	-2
29	F	2013-2014	Strickland	76	Probable Difference	67	Probable Difference	-9
30	M	2013-2014	Strickland	75	Probable Difference	88	Definite Difference	13
31	M	2013-2014	Strickland	78	Probable Difference	78	Probable Difference	0
32	M	2013-2014	Strickland	79	Probable Difference	81	Probable Difference	2
33	F	2013-2014	Strickland	76	Probable Difference	71	Probable Difference	-5
34	F	2012-2013	Byers	50	Typical	46	Typical	-4
35	F	2012-2013	Byers	49	Typical	46	Typical	-3
36	M	2012-2013	Byers	77	Probable Difference	79	Probable Difference	2
37	M	2012-2013	Byers	44	Typical	44	Typical	0
38	F	2012-2013	Byers	61	Typical	63	Probable Difference	2
39	M	2012-2013	Byers	72	Probable Difference	70	Probable Difference	-2
40	F	2012-2013	Byers	43	Typical	44	Typical	1
41	F	2012-2013	Byers	44	Typical	42	Typical	-2
42	F	2012-2013	Byers	45	Typical	45	Typical	0
43	M	2012-2013	Byers	55	Typical	55	Typical	0
44	F	2012-2013	Byers	45	Typical	45	Typical	0
45	F	2012-2013	Watson	45	Typical	50	Typical	5
46	F	2012-2013	Watson	49	Typical	45	Typical	-4
47	M	2012-2013	Watson	42	Typical	43	Typical	1
48	M	2012-2013	Watson	43	Typical	43	Typical	0
49	F	2012-2013	Watson	42	Typical	46	Typical	4
50	F	2012-2013	Watson	45	Typical	42	Typical	-3
51	M	2012-2013	Watson	42	Typical	42	Typical	0
52	F	2012-2013	Watson	64	Probable Difference	44	Typical	-20
53	M	2012-2013	Watson	48	Typical	45	Typical	-3

SPM Total Sensory Systems: A Pre-Selected Category								
ID Number	Gender	School Year	Class	Pre-Test Raw Score	Pre-Test Functional Classification	Post-Test Raw Score	Post-Test Functional Classification	Score Difference
54	F	2011-2012	Byers	60	Typical	46	Typical	-14
55	M	2011-2012	Byers	45	Typical	48	Typical	3
56	F	2011-2012	Byers	60	Typical	44	Typical	-16
57	M	2011-2012	Byers	47	Typical	45	Typical	-2
58	F	2011-2012	Byers	43	Typical	42	Typical	-1
59	F	2011-2012	Byers	65	Probable Difference	42	Typical	-23
60	F	2011-2012	Byers	66	Probable Difference	48	Typical	-18
61	M	2011-2012	Byers	83	Probable Difference	42	Typical	-41
62	M	2011-2012	Byers	96	Definite Difference	43	Typical	-53
63	M	2011-2012	Byers	89	Definite Difference	51	Typical	-38
64	F	2011-2012	Byers	48	Typical	46	Typical	-2
65	M	2011-2012	Byers	111	Definite Difference	73	Probable Difference	-38
66	F	2011-2012	Watson	47	Typical	47	Typical	0
67	M	2011-2012	Watson	52	Typical	42	Typical	-10
68	F	2011-2012	Watson	51	Typical	69	Probable Difference	18
69	F	2011-2012	Watson	42	Typical	42	Typical	0
70	M	2011-2012	Watson	52	Typical	47	Typical	-5
71	M	2011-2012	Watson	94	Definite Difference	70	Probable Difference	-24
72	F	2011-2012	Watson	42	Typical	43	Typical	1
73	M	2011-2012	Watson	83	Probable Difference	83	Probable Difference	0
74	F	2011-2012	Watson	42	Typical	42	Typical	0
75	M	2011-2012	Watson	42	Typical	51	Typical	9
76	M	2011-2012	Watson	65	Probable Difference	77	Probable Difference	12
77	F	2011-2012	Watson	42	Typical	45	Typical	3
78	M	2010-2011	Byers	82	Probable Difference	61	Typical	-21
79	F	2010-2011	Byers	52	Typical	42	Typical	-10
80	M	2010-2011	Byers	53	Typical	44	Typical	-9
81	F	2010-2011	Byers	49	Typical	42	Typical	-7
82	F	2010-2011	Byers	43	Typical	42	Typical	-1
83	M	2010-2011	Byers	47	Typical	43	Typical	-4
84	M	2010-2011	Byers	57	Typical	54	Typical	-3
85	F	2010-2011	Byers	51	Typical	59	Typical	8
86	F	2010-2011	Byers	44	Typical	45	Typical	1
87	M	2010-2011	Byers	77	Probable Difference	74	Probable Difference	-3
88	F	2010-2011	Byers	86	Probable Difference	58	Typical	-28
89	F	2010-2011	Byers	57	Typical	44	Typical	-13
90	M	2010-2011	Byers	54	Typical	52	Typical	-2
91	F	2010-2011	Byers	50	Typical	42	Typical	-8
92	M	2010-2011	Byers	63	Probable Difference	44	Typical	-19
93	M	2010-2011	Watson	43	Typical	56	Typical	13
94	M	2010-2011	Watson	82	Probable Difference	65	Probable Difference	-17
95	M	2010-2011	Watson	77	Probable Difference	78	Probable Difference	1
96	F	2010-2011	Watson	89	Definite Difference	70	Probable Difference	-19
97	M	2010-2011	Watson	63	Probable Difference	59	Typical	-4
98	F	2010-2011	Watson	44	Typical	50	Typical	6
99	F	2010-2011	Watson	44	Typical	51	Typical	7
100	F	2010-2011	Watson	46	Typical	49	Typical	3
101	F	2010-2011	Watson	55	Typical	56	Typical	1
102	F	2010-2011	Watson	93	Definite Difference	87	Definite Difference	-6
103	M	2010-2011	Watson	51	Typical	50	Typical	-1
104	M	2010-2011	Watson	81	Probable Difference	68	Probable Difference	-13

SPM Social Participation: Not a Pre-Selected Category								
ID Number	Gender	School Year	Class	Pre-Test Raw Score	Pre-Test Functional Classification	Post-Test Raw Score	Post-Test Functional Classification	Score Difference
1	F	2013-2014	Byers	11	Typical	11	Typical	0
2	F	2013-2014	Byers	11	Typical	10	Typical	-1
3	F	2013-2014	Byers	19	Typical	19	Typical	0
4	F	2013-2014	Byers	12	Typical	11	Typical	-1
5	M	2013-2014	Byers	11	Typical	10	Typical	-1
6	F	2013-2014	Byers	18	Typical	17	Typical	-1
7	M	2013-2014	Byers	28	Probable Difference	22	Typical	-6
8	F	2013-2014	Byers	17	Typical	13	Typical	-4
9	F	2013-2014	Byers	23	Probable Difference	11	Typical	-12
10	F	2013-2014	Byers	13	Typical	13	Typical	0
11	M	2013-2014	Byers	31	Probable Difference	19	Typical	-12
12	F	2013-2014	Byers	17	Typical	16	Typical	-1
13	M	2013-2014	Byers	14	Typical	12	Typical	-2
14	M	2013-2014	Byers	10	Typical	11	Typical	1
15	M	2013-2014	Byers	15	Typical	11	Typical	-4
16	M	2013-2014	Byers	14	Typical	11	Typical	-3
17	M	2013-2014	Byers	10	Typical	10	Typical	0
18	F	2013-2014	Strickland	22	Typical	19	Typical	-3
19	F	2013-2014	Strickland	29	Probable Difference	28	Probable Difference	-1
20	M	2013-2014	Strickland	19	Typical	16	Typical	-3
21	M	2013-2014	Strickland	31	Probable Difference	29	Probable Difference	-2
22	F	2013-2014	Strickland	24	Probable Difference	24	Probable Difference	0
23	M	2013-2014	Strickland	24	Probable Difference	21	Typical	-3
24	M	2013-2014	Strickland	25	Probable Difference	22	Typical	-3
25	M	2013-2014	Strickland	19	Typical	15	Typical	-4
26	M	2013-2014	Strickland	23	Probable Difference	20	Typical	-3
27	F	2013-2014	Strickland	29	Probable Difference	26	Probable Difference	-3
28	M	2013-2014	Strickland	31	Probable Difference	32	Definite Difference	1
29	F	2013-2014	Strickland	23	Probable Difference	24	Probable Difference	1
30	M	2013-2014	Strickland	23	Probable Difference	23	Probable Difference	0
31	M	2013-2014	Strickland	18	Typical	17	Typical	-1
32	M	2013-2014	Strickland	25	Probable Difference	23	Probable Difference	-2
33	F	2013-2014	Strickland	28	Probable Difference	26	Probable Difference	-2
34	F	2012-2013	Byers	16	Typical	15	Typical	-1
35	F	2012-2013	Byers	13	Typical	16	Typical	3
36	M	2012-2013	Byers	19	Typical	17	Typical	-2
37	M	2012-2013	Byers	11	Typical	10	Typical	-1
38	F	2012-2013	Byers	17	Typical	15	Typical	-2
39	M	2012-2013	Byers	18	Typical	18	Typical	0
40	F	2012-2013	Byers	10	Typical	10	Typical	0
41	F	2012-2013	Byers	10	Typical	10	Typical	0
42	F	2012-2013	Byers	13	Typical	14	Typical	1
43	M	2012-2013	Byers	15	Typical	14	Typical	-1
44	F	2012-2013	Byers	10	Typical	10	Typical	0
45	F	2012-2013	Watson	10	Typical	10	Typical	0
46	F	2012-2013	Watson	10	Typical	17	Typical	7
47	M	2012-2013	Watson	10	Typical	10	Typical	0
48	M	2012-2013	Watson	10	Typical	10	Typical	0
49	F	2012-2013	Watson	10	Typical	10	Typical	0
50	F	2012-2013	Watson	10	Typical	10	Typical	0
51	M	2012-2013	Watson	10	Typical	10	Typical	0
52	F	2012-2013	Watson	15	Typical	22	Typical	7
53	M	2012-2013	Watson	10	Typical	17	Typical	7

SPM Social Participation: Not a Pre-Selected Category								
ID Number	Gender	School Year	Class	Pre-Test Raw Score	Pre-Test Functional Classification	Post-Test Raw Score	Post-Test Functional Classification	Score Difference
54	F	2011-2012	Byers	10	Typical	11	Typical	1
55	M	2011-2012	Byers	10	Typical	12	Typical	2
56	F	2011-2012	Byers	10	Typical	11	Typical	1
57	M	2011-2012	Byers	10	Typical	10	Typical	0
58	F	2011-2012	Byers	10	Typical	10	Typical	0
59	F	2011-2012	Byers	15	Typical	11	Typical	-4
60	F	2011-2012	Byers	10	Typical	11	Typical	1
61	M	2011-2012	Byers	13	Typical	11	Typical	-2
62	M	2011-2012	Byers	10	Typical	10	Typical	0
63	M	2011-2012	Byers	35	Definite Difference	19	Typical	-16
64	F	2011-2012	Byers	11	Typical	10	Typical	-1
65	M	2011-2012	Byers	31	Probable Difference	19	Typical	-12
66	F	2011-2012	Watson	10	Typical	10	Typical	0
67	M	2011-2012	Watson	22	Typical	10	Typical	-12
68	F	2011-2012	Watson	12	Typical	17	Typical	5
69	F	2011-2012	Watson	10	Typical	10	Typical	0
70	M	2011-2012	Watson	10	Typical	10	Typical	0
71	M	2011-2012	Watson	27	Probable Difference	28	Probable Difference	1
72	F	2011-2012	Watson	10	Typical	10	Typical	0
73	M	2011-2012	Watson	25	Probable Difference	22	Typical	-3
74	F	2011-2012	Watson	10	Typical	10	Typical	0
75	M	2011-2012	Watson	10	Typical	10	Typical	0
76	M	2011-2012	Watson	18	Typical	19	Typical	1
77	F	2011-2012	Watson	10	Typical	10	Typical	0
78	M	2010-2011	Byers	16	Typical	13	Typical	-3
79	F	2010-2011	Byers	23	Probable Difference	15	Typical	-8
80	M	2010-2011	Byers	10	Typical	13	Typical	3
81	F	2010-2011	Byers	16	Typical	12	Typical	-4
82	F	2010-2011	Byers	10	Typical	10	Typical	0
83	M	2010-2011	Byers	10	Typical	10	Typical	0
84	M	2010-2011	Byers	12	Typical	11	Typical	-1
85	F	2010-2011	Byers	14	Typical	16	Typical	2
86	F	2010-2011	Byers	13	Typical	12	Typical	-1
87	M	2010-2011	Byers	21	Typical	19	Typical	-2
88	F	2010-2011	Byers	30	Probable Difference	18	Typical	-12
89	F	2010-2011	Byers	24	Probable Difference	14	Typical	-10
90	M	2010-2011	Byers	21	Typical	17	Typical	-4
91	F	2010-2011	Byers	17	Typical	13	Typical	-4
92	M	2010-2011	Byers	11	Typical	10	Typical	-1
93	M	2010-2011	Watson	10	Typical	10	Typical	0
94	M	2010-2011	Watson	10	Typical	13	Typical	3
95	M	2010-2011	Watson	19	Typical	14	Typical	-5
96	F	2010-2011	Watson	30	Probable Difference	23	Probable Difference	-7
97	M	2010-2011	Watson	19	Typical	13	Typical	-6
98	F	2010-2011	Watson	10	Typical	10	Typical	0
99	F	2010-2011	Watson	10	Typical	10	Typical	0
100	F	2010-2011	Watson	10	Typical	10	Typical	0
101	F	2010-2011	Watson	14	Typical	10	Typical	-4
102	F	2010-2011	Watson	28	Probable Difference	27	Probable Difference	-1
103	M	2010-2011	Watson	10	Typical	10	Typical	0
104	M	2010-2011	Watson	18	Typical	19	Typical	1

SPM Body Awareness: Not a Pre-Selected Category								
ID Number	Gender	School Year	Class	Pre-Test Raw Score	Pre-Test Functional Classification	Post-Test Raw Score	Post-Test Functional Classification	Score Difference
1	F	2013-2014	Byers	7	Typical	7	Typical	0
2	F	2013-2014	Byers	7	Typical	7	Typical	0
3	F	2013-2014	Byers	15	Probable Difference	21	Definite Difference	6
4	F	2013-2014	Byers	8	Typical	7	Typical	-1
5	M	2013-2014	Byers	10	Typical	7	Typical	-3
6	F	2013-2014	Byers	7	Typical	7	Typical	0
7	M	2013-2014	Byers	12	Probable Difference	11	Typical	-1
8	F	2013-2014	Byers	8	Typical	7	Typical	-1
9	F	2013-2014	Byers	9	Typical	8	Typical	-1
10	F	2013-2014	Byers	10	Typical	7	Typical	-3
11	M	2013-2014	Byers	20	Definite Difference	20	Definite Difference	0
12	F	2013-2014	Byers	7	Typical	8	Typical	1
13	M	2013-2014	Byers	8	Typical	7	Typical	-1
14	M	2013-2014	Byers	11	Typical	7	Typical	-4
15	M	2013-2014	Byers	13	Probable Difference	7	Typical	-6
16	M	2013-2014	Byers	19	Definite Difference	16	Probable Difference	-3
17	M	2013-2014	Byers	8	Typical	7	Typical	-1
18	F	2013-2014	Strickland	5	Typical	9	Typical	4
19	F	2013-2014	Strickland	11	Typical	15	Probable Difference	4
20	M	2013-2014	Strickland	10	Typical	10	Typical	0
21	M	2013-2014	Strickland	13	Probable Difference	14	Probable Difference	1
22	F	2013-2014	Strickland	11	Typical	11	Typical	0
23	M	2013-2014	Strickland	11	Typical	13	Probable Difference	2
24	M	2013-2014	Strickland	22	Definite Difference	16	Probable Difference	-6
25	M	2013-2014	Strickland	9	Typical	9	Typical	0
26	M	2013-2014	Strickland	10	Typical	10	Typical	0
27	F	2013-2014	Strickland	13	Probable Difference	13	Probable Difference	0
28	M	2013-2014	Strickland	22	Definite Difference	19	Definite Difference	-3
29	F	2013-2014	Strickland	16	Probable Difference	11	Typical	-5
30	M	2013-2014	Strickland	14	Probable Difference	13	Probable Difference	-1
31	M	2013-2014	Strickland	10	Typical	9	Typical	-1
32	M	2013-2014	Strickland	15	Probable Difference	15	Probable Difference	0
33	F	2013-2014	Strickland	15	Probable Difference	13	Probable Difference	-2
34	F	2012-2013	Byers	8	Typical	7	Typical	-1
35	F	2012-2013	Byers	10	Typical	8	Typical	-2
36	M	2012-2013	Byers	18	Probable Difference	18	Probable Difference	0
37	M	2012-2013	Byers	8	Typical	8	Typical	0
38	F	2012-2013	Byers	9	Typical	15	Probable Difference	6
39	M	2012-2013	Byers	19	Definite Difference	18	Probable Difference	-1
40	F	2012-2013	Byers	8	Typical	8	Typical	0
41	F	2012-2013	Byers	8	Typical	7	Typical	-1
42	F	2012-2013	Byers	9	Typical	7	Typical	-2
43	M	2012-2013	Byers	8	Typical	9	Typical	1
44	F	2012-2013	Byers	8	Typical	8	Typical	0
45	F	2012-2013	Watson	7	Typical	8	Typical	1
46	F	2012-2013	Watson	7	Typical	8	Typical	1
47	M	2012-2013	Watson	7	Typical	7	Typical	0
48	M	2012-2013	Watson	7	Typical	7	Typical	0
49	F	2012-2013	Watson	7	Typical	8	Typical	1
50	F	2012-2013	Watson	7	Typical	7	Typical	0
51	M	2012-2013	Watson	7	Typical	7	Typical	0
52	F	2012-2013	Watson	7	Typical	7	Typical	0
53	M	2012-2013	Watson	8	Typical	8	Typical	0

SPM Body Awareness: Not a Pre-Selected Category								
ID Number	Gender	School Year	Class	Pre-Test Raw Score	Pre-Test Functional Classification	Post-Test Raw Score	Post-Test Functional Classification	Score Difference
54	F	2011-2012	Byers	8	Typical	8	Typical	0
55	M	2011-2012	Byers	8	Typical	8	Typical	0
56	F	2011-2012	Byers	8	Typical	7	Typical	-1
57	M	2011-2012	Byers	9	Typical	9	Typical	0
58	F	2011-2012	Byers	8	Typical	7	Typical	-1
59	F	2011-2012	Byers	9	Typical	7	Typical	-2
60	F	2011-2012	Byers	9	Typical	9	Typical	0
61	M	2011-2012	Byers	17	Probable Difference	7	Typical	-10
62	M	2011-2012	Byers	12	Probable Difference	8	Typical	-4
63	M	2011-2012	Byers	18	Probable Difference	10	Typical	-8
64	F	2011-2012	Byers	8	Typical	10	Typical	2
65	M	2011-2012	Byers	26	Definite Difference	17	Probable Difference	-9
66	F	2011-2012	Watson	7	Typical	7	Typical	0
67	M	2011-2012	Watson	7	Typical	7	Typical	0
68	F	2011-2012	Watson	8	Typical	12	Probable Difference	4
69	F	2011-2012	Watson	7	Typical	7	Typical	0
70	M	2011-2012	Watson	8	Typical	7	Typical	-1
71	M	2011-2012	Watson	10	Typical	12	Probable Difference	2
72	F	2011-2012	Watson	7	Typical	7	Typical	0
73	M	2011-2012	Watson	11	Typical	11	Typical	0
74	F	2011-2012	Watson	7	Typical	7	Typical	0
75	M	2011-2012	Watson	7	Typical	8	Typical	1
76	M	2011-2012	Watson	7	Typical	10	Typical	3
77	F	2011-2012	Watson	7	Typical	7	Typical	0
78	M	2010-2011	Byers	22	Definite Difference	13	Probable Difference	-9
79	F	2010-2011	Byers	9	Typical	7	Typical	-2
80	M	2010-2011	Byers	12	Probable Difference	8	Typical	-4
81	F	2010-2011	Byers	9	Typical	7	Typical	-2
82	F	2010-2011	Byers	8	Typical	7	Typical	-1
83	M	2010-2011	Byers	10	Typical	7	Typical	-3
84	M	2010-2011	Byers	9	Typical	8	Typical	-1
85	F	2010-2011	Byers	10	Typical	12	Probable Difference	2
86	F	2010-2011	Byers	8	Typical	7	Typical	-1
87	M	2010-2011	Byers	16	Probable Difference	18	Probable Difference	2
88	F	2010-2011	Byers	13	Probable Difference	8	Typical	-5
89	F	2010-2011	Byers	8	Typical	8	Typical	0
90	M	2010-2011	Byers	11	Typical	8	Typical	-3
91	F	2010-2011	Byers	8	Typical	7	Typical	-1
92	M	2010-2011	Byers	14	Probable Difference	7	Typical	-7
93	M	2010-2011	Watson	7	Typical	7	Typical	0
94	M	2010-2011	Watson	18	Probable Difference	10	Typical	-8
95	M	2010-2011	Watson	14	Probable Difference	13	Probable Difference	-1
96	F	2010-2011	Watson	11	Typical	10	Typical	-1
97	M	2010-2011	Watson	13	Probable Difference	7	Typical	-6
98	F	2010-2011	Watson	7	Typical	7	Typical	0
99	F	2010-2011	Watson	7	Typical	8	Typical	1
100	F	2010-2011	Watson	7	Typical	7	Typical	0
101	F	2010-2011	Watson	7	Typical	7	Typical	0
102	F	2010-2011	Watson	16	Typical	10	Typical	-6
103	M	2010-2011	Watson	7	Typical	7	Typical	0
104	M	2010-2011	Watson	16	Probable Difference	9	Typical	-7

SPM Planning and Ideas: Not a Pre-Selected Category								
ID Number	Gender	School Year	Class	Pre-Test Raw Score	Pre-Test Functional Classification	Post-Test Raw Score	Post-Test Functional Classification	Score Difference
1	F	2013-2014	Byers	10	Typical	10	Typical	0
2	F	2013-2014	Byers	10	Typical	10	Typical	0
3	F	2013-2014	Byers	10	Typical	10	Typical	0
4	F	2013-2014	Byers	10	Typical	10	Typical	0
5	M	2013-2014	Byers	10	Typical	10	Typical	0
6	F	2013-2014	Byers	16	Typical	11	Typical	-5
7	M	2013-2014	Byers	10	Typical	17	Typical	7
8	F	2013-2014	Byers	10	Typical	10	Typical	0
9	F	2013-2014	Byers	20	Probable Difference	11	Typical	-9
10	F	2013-2014	Byers	10	Typical	10	Typical	0
11	M	2013-2014	Byers	32	Definite Difference	23	Probable Difference	-9
12	F	2013-2014	Byers	10	Typical	10	Typical	0
13	M	2013-2014	Byers	15	Typical	10	Typical	-5
14	M	2013-2014	Byers	10	Typical	10	Typical	0
15	M	2013-2014	Byers	10	Typical	10	Typical	0
16	M	2013-2014	Byers	18	Typical	10	Typical	-8
17	M	2013-2014	Byers	10	Typical	10	Typical	0
18	F	2013-2014	Strickland	19	Probable Difference	19	Probable Difference	0
19	F	2013-2014	Strickland	24	Probable Difference	26	Probable Difference	2
20	M	2013-2014	Strickland	21	Probable Difference	21	Probable Difference	0
21	M	2013-2014	Strickland	25	Probable Difference	22	Probable Difference	-3
22	F	2013-2014	Strickland	20	Probable Difference	18	Typical	-2
23	M	2013-2014	Strickland	15	Typical	13	Typical	-2
24	M	2013-2014	Strickland	28	Definite Difference	18	Typical	-10
25	M	2013-2014	Strickland	23	Probable Difference	21	Probable Difference	-2
26	M	2013-2014	Strickland	20	Probable Difference	18	Typical	-2
27	F	2013-2014	Strickland	26	Probable Difference	20	Probable Difference	-6
28	M	2013-2014	Strickland	28	Definite Difference	28	Definite Difference	0
29	F	2013-2014	Strickland	21	Probable Difference	18	Typical	-3
30	M	2013-2014	Strickland	26	Probable Difference	21	Probable Difference	-5
31	M	2013-2014	Strickland	20	Probable Difference	22	Probable Difference	2
32	M	2013-2014	Strickland	22	Probable Difference	19	Probable Difference	-3
33	F	2013-2014	Strickland	20	Probable Difference	19	Probable Difference	-1
34	F	2012-2013	Byers	10	Typical	10	Typical	0
35	F	2012-2013	Byers	10	Typical	11	Typical	1
36	M	2012-2013	Byers	17	Typical	16	Typical	-1
37	M	2012-2013	Byers	10	Typical	10	Typical	0
38	F	2012-2013	Byers	17	Typical	12	Typical	-5
39	M	2012-2013	Byers	18	Typical	10	Typical	-8
40	F	2012-2013	Byers	10	Typical	11	Typical	1
41	F	2012-2013	Byers	10	Typical	10	Typical	0
42	F	2012-2013	Byers	10	Typical	10	Typical	0
43	M	2012-2013	Byers	15	Typical	11	Typical	-4
44	F	2012-2013	Byers	16	Typical	11	Typical	-5
45	F	2012-2013	Watson	15	Typical	14	Typical	-1
46	F	2012-2013	Watson	10	Typical	14	Typical	4
47	M	2012-2013	Watson	10	Typical	10	Typical	0
48	M	2012-2013	Watson	10	Typical	11	Typical	1
49	F	2012-2013	Watson	10	Typical	10	Typical	0
50	F	2012-2013	Watson	15	Typical	10	Typical	-5
51	M	2012-2013	Watson	10	Typical	10	Typical	0
52	F	2012-2013	Watson	19	Probable Difference	10	Typical	-9
53	M	2012-2013	Watson	18	Typical	11	Typical	-7

SPM Planning and Ideas: Not a Pre-Selected Category								
ID Number	Gender	School Year	Class	Pre-Test Raw Score	Pre-Test Functional Classification	Post-Test Raw Score	Post-Test Functional Classification	Score Difference
54	F	2011-2012	Byers	10	Typical	10	Typical	0
55	M	2011-2012	Byers	10	Typical	14	Typical	4
56	F	2011-2012	Byers	10	Typical	10	Typical	0
57	M	2011-2012	Byers	11	Typical	12	Typical	1
58	F	2011-2012	Byers	10	Typical	10	Typical	0
59	F	2011-2012	Byers	10	Typical	10	Typical	0
60	F	2011-2012	Byers	10	Typical	12	Typical	2
61	M	2011-2012	Byers	10	Typical	11	Typical	1
62	M	2011-2012	Byers	15	Typical	10	Typical	-5
63	M	2011-2012	Byers	22	Probable Difference	12	Typical	-10
64	F	2011-2012	Byers	12	Typical	10	Typical	-2
65	M	2011-2012	Byers	26	Probable Difference	16	Typical	-10
66	F	2011-2012	Watson	12	Typical	15	Typical	3
67	M	2011-2012	Watson	24	Probable Difference	16	Typical	-8
68	F	2011-2012	Watson	19	Probable Difference	19	Probable Difference	0
69	F	2011-2012	Watson	10	Typical	12	Typical	2
70	M	2011-2012	Watson	20	Probable Difference	12	Typical	-8
71	M	2011-2012	Watson	22	Probable Difference	20	Probable Difference	-2
72	F	2011-2012	Watson	10	Typical	10	Typical	0
73	M	2011-2012	Watson	22	Probable Difference	27	Probable Difference	5
74	F	2011-2012	Watson	10	Typical	11	Typical	1
75	M	2011-2012	Watson	10	Typical	13	Typical	3
76	M	2011-2012	Watson	19	Probable Difference	20	Probable Difference	1
77	F	2011-2012	Watson	10	Typical	15	Typical	5
78	M	2010-2011	Byers	11	Typical	15	Typical	4
79	F	2010-2011	Byers	10	Typical	10	Typical	0
80	M	2010-2011	Byers	10	Typical	10	Typical	0
81	F	2010-2011	Byers	14	Typical	11	Typical	-3
82	F	2010-2011	Byers	10	Typical	10	Typical	0
83	M	2010-2011	Byers	10	Typical	10	Typical	0
84	M	2010-2011	Byers	15	Typical	10	Typical	-5
85	F	2010-2011	Byers	13	Typical	14	Typical	1
86	F	2010-2011	Byers	10	Typical	10	Typical	0
87	M	2010-2011	Byers	20	Probable Difference	19	Probable Difference	-1
88	F	2010-2011	Byers	17	Typical	13	Typical	-4
89	F	2010-2011	Byers	19	Probable Difference	14	Typical	-5
90	M	2010-2011	Byers	19	Probable Difference	11	Typical	-8
91	F	2010-2011	Byers	10	Typical	11	Typical	1
92	M	2010-2011	Byers	12	Typical	10	Typical	-2
93	M	2010-2011	Watson	26	Probable Difference	15	Typical	-11
94	M	2010-2011	Watson	16	Typical	19	Probable Difference	3
95	M	2010-2011	Watson	20	Probable Difference	20	Probable Difference	0
96	F	2010-2011	Watson	33	Definite Difference	23	Probable Difference	-10
97	M	2010-2011	Watson	18	Typical	18	Typical	0
98	F	2010-2011	Watson	15	Typical	18	Typical	3
99	F	2010-2011	Watson	19	Probable Difference	19	Probable Difference	0
100	F	2010-2011	Watson	10	Typical	15	Typical	5
101	F	2010-2011	Watson	10	Typical	18	Typical	8
102	F	2010-2011	Watson	28	Definite Difference	26	Probable Difference	-2
103	M	2010-2011	Watson	23	Probable Difference	18	Typical	-5
104	M	2010-2011	Watson	30	Definite Difference	25	Probable Difference	-5